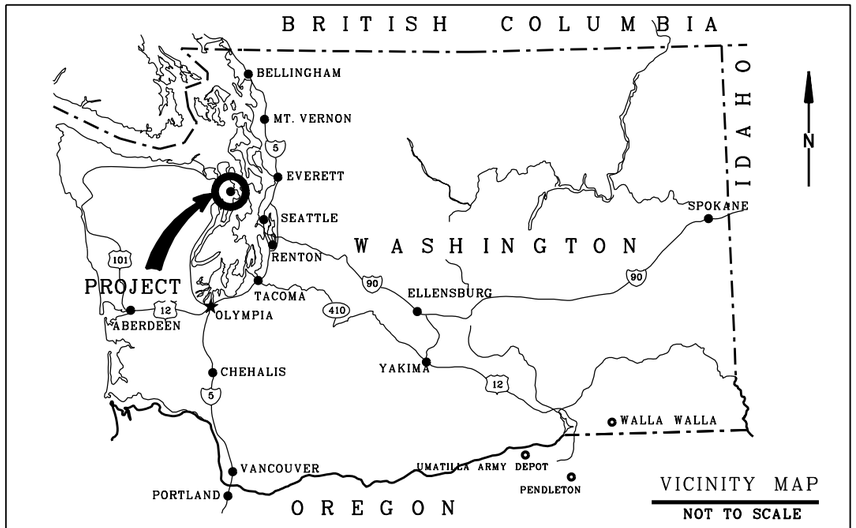
U.S. ARMY CORPS
OF ENGINEERS
SEATTLE DISTRICT

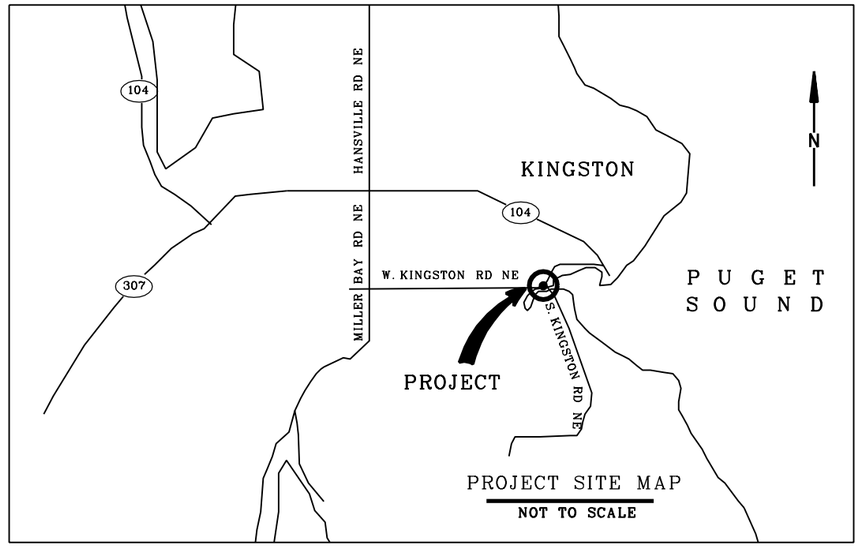
CARPENTER CREEK ESTUARY

SECTION 206 RESTORATION PROJECT

KITSAP COUNTY, WASHINGTON



VICINITY MAP
NOT TO SCALE



PROJECT SITE MAP
NOT TO SCALE

SHEET	PLATE	DESCRIPTION
1	G1	TITLE SHEET
2	G2	QUANTITIES, GENERAL NOTES, LEGEND, AND ABBREVIATIONS
3	G3	CONSTRUCTION SEQUENCE NOTES
4	G4	SITE PLAN / PROJECT MEASURES
5	T1	TRAFFIC CONTROL PLAN - SOUTH KINGSTON ROAD
6	T2	TRAFFIC CONTROL PLAN - WEST KINGSTON ROAD
7	C1	PLAN AND PROFILE - SOUTH KINGSTON ROAD
8	C2	PLAN AND PROFILE - CARPENTER CREEK SOUTH
9	C3	PLAN AND PROFILE - WEST KINGSTON ROAD
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11	C5	BRIDGE PLAN AND SECTION - SOUTH KINGSTON ROAD
12	C6	BRIDGE ELEVEATION AND FOUNDATION LAYOUT - SOUTH KINGSTON RD
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14	C8	BRIDGE ELEVATION AND FOUNDATION LAYOUT-WEST KINGSTON RD
15	C9	CHANNEL AND ROAD - DETAILS
16	C10	DIVERSION PLAN - CARPENTER CREEK SOUTH
17	C11	DIVERSION PLAN - CARPENTER CREEK WEST
18	P1	PLANTING PLAN AND NOTES

SHEET INDEX

THIS PROJECT WAS DESIGNED BY:
TETRA TECH, INC.
FOR THE U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT

TETRA TECH, INC.
1925 POST ALLEY, STE. 4
SEATTLE, WA 98101
(206) 728-9655

COMPUTER AIDED DESIGN & DRAFTING

CONTRACT NO. DACA67-02-D-2009
DELIVERY ORDER NO. 0001

SAFETY PAYS

VALUE ENGINEERING PAYS

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON
U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

TITLE SHEET

KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE	PLATE
D			JUNE 2003	G1
DSGN. IGP		CHK. YHC	SHEET 1	

GENERAL CONSTRUCTION NOTES

1. CONSTRUCTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE ALL WORK AS INDICATED ON THE CONSTRUCTION DOCUMENTS.

2. THE CONSTRUCTOR SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION.

3. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE COE AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.

4. THE CONSTRUCTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

5. THE CONSTRUCTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

6. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.

7. CONSTRUCTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

8. THE CONSTRUCTOR SHALL DEFEND, INDEMNIFY AND HOLD THE COE AND THE ARCHITECT/ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE COE OR THE ARCHITECT/ENGINEER.

9. THE CONSTRUCTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE BEST SKILLS AND ATTENTION. THE CONSTRUCTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THIS CONTRACT.

10. DETAILS ARE INTENDED TO SHOW FINAL RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB SITE DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.

11. THE CONSTRUCTOR SHALL MAKE ALL NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, ROADWAY, DRAINAGE WAYS, CULVERTS, AND VEGETATION UNTIL SUCH ITEMS ARE TO BE DISTURBED OR REMOVED AS INDICATED ON THE CONSTRUCTION DOCUMENTS.

12. CONSTRUCTOR SHALL KEEP JOB SITE AREA CLEAN, HAZARD FREE, AND DIPOSE OF ALL DIRT, DEBRIS, RUBBISH AND AT COMPLETION OF PROJECT REMOVE ALL MATERIAL AND EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY.

13. REPRESENTATIONS OF TRUE NORTH SHALL NOT BE USED TO IDENTIFY OR ESTABLISH THE BEARING OF TRUE NORTH AT THIS JOB SITE.

14. IT SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. CONSTRUCTOR SHALL CALL LOCAL DIGGER HOTLINE FOR UTILITY LOCATIONS 48 HOURS PRIOR TO START OF CONSTRUCTION.

15. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON AS-BUILT DRAWINGS BY THE CONSTRUCTOR AND ISSUED TO THE ARCHITECT/ENGINEER AT COMPLETION OF THE PROJECT.

STANDARD CIVIL NOTES

1. ALL SITE WORK SHALL BE AS INDICATED ON THE CONSTRUCTION DOCUMENTS, WHICH INCLUDE THE BASIS OF DESIGN REPORT.

2. DO NOT EXCAVATE OR DISTURB BEYOND THE JOB SITE AREA, UNLESS NOTED OTHERWISE.

3. RUBBISH, DEBRIS, CULVERTS AND OTHER REFUSE SHALL BE REMOVED FROM THE JOB SITE AND DIPOSED OF LEGALLY.

4. NO TOP SOIL, ORGANIC SPOILS, FILL, EXCAVATED MATERIAL, RIPRAP, FOUNDATION/BRIDGE MATERIAL, EQUIPMENT OR ANY OTHER SUCH ITEMS SHALL BE PLACED, STOCKPILED OR PARKED IN THE EXISTING ROADWAY SUCH THAT IT WOULD PREVENT A MINIMUM WIDTH OF 12 FEET FOR TRAFFIC CLEARENCE, UNTIL THE NEW BRIDGE AND ROADWAY ARE COMPLETE AND TRAFFIC HAS BEEN REROUTED.

5. THE NEW ROADWAY SUBGRADE SHALL BE COMPACTED IN 6" LAYERS AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO THE ROADBASE APPLICATION.

6. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF WORK, SHALL BE RELOCATED AS DIRECTED BY THE ARCHITECT/ENGINEER.

7. EXTREME CAUTION SHOULD BE USED BY THE CONSTRUCTOR WHEN EXCAVATING OR PILE DRIVING AROUND OR NEAR UTILITIES. CONSTRUCTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORK CREW.

8. ALL INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHICH INTERFERE WITH THE EXECUTION OF WORK, SHALL BE REMOVED AND SHALL BE CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER.

9. THE AREAS OF THE JOB SITE DISTURBED BY THE WORK AND NOT PART OF THE NEW BRIDGE/ROADWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND REVEGETATED AS SPECIFIED HEREON.

GENERAL STRUCTURAL NOTES

1. WHERE A CONSTRUCTION DETAIL IS NOT SHOWN OR NOTED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.

2. NOTES AND DETAILS ON THE CONSTRUCTION DOCUMENTS SHALL TAKE PRECEDENCE OVER GENERAL NOTES.

3. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON THE CONSTRUCTION DOCUMENTS.

4. THE CONTSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONSTRUCTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURES, WORKERS, PEDESTRIANS, AND MOTORIST DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, TEMPORARY STRUCTURES, PARTIALLY COMPLETED WORK, AND DIVERSIONS ETC. OBSERVATION VISITS TO THE JOB SITE BY THE ARCHITECT/ENGINEER SHALL NOT INCLUDE INSPECTION OF SUCH ITEMS.

5. ASTM SPECIFICATIONS NOTED ON THE CONSTRUCTION DOCUMENTS SHALL BE OF THE LATEST REVISION.

GENERAL NOTES

EXISTING GRADE LINES
EXISTING TREELINE
EXISTING THALWEG
EXISTING CENTERLINE
EXISTING FLOWLINE
EXISTING GROUND
PROPOSED GRADE LINES
PROPOSED TREELINE
PROPOSED DRAINAGE SWALE
PROPOSED CONTROL LINE
PROPOSED FLOWLINE
PROPOSED GRADING LIMIT
PROPOSED SILT FENCE
PROPOSED RIPRAP
PROPOSED ROADBASE
PROPOSED CONCRETE
COMPACTED SOIL
WATER SURFACE
CENTERLINE
SLOPE
LARGE WOODY DEBRIS

LEGEND

AC	ASPHALTIC CONCRETE
A/E	ARCHITECT/ENGINEER
ALT	ALTERNATE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
CF	CUBIC FEET
CFS	CUBIC FEET PER SECOND
CMP	CORREGATED METAL PIPE
COE	CORPS OF ENGINEERS
CONC.	CONCRETE
CP	CONTROL POINT
CY	CUBIC YARD
DIA	DIAMETER
D/S	DOWNSTREAM
EA	EACH
EL	ELEVATION
(E)	EXISTING
EST	ESTIMATED
FT	FEET
G	GRADE (SLOPE)
GA	GAUGE
GAL	GALLON
GB	GRADE BREAK
GRN	GREEN
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HHW	HIGHER HIGH WATER
HOR	HORIZONTAL
HW	HIGH WATER
IE	INVERT ELEVATION
LBS	POUNDS
LF	LINEAR FEET
LRFD	LOAD RESISTANCE FACTOR DESIGN
LS	LUMP SUM
MAX	MAXIMUM
MIN	MINIMUM
MTL	MEAN TIDE LEVEL
NTS	NOT TO SCALE
OC	ON CENTER
OHW	ORDINARY HIGH WATER
PVC	POLYVINYL CHLORIDE
RD	ROAD
S	SOUTH
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SS	SANITARY SEWER
SF	SQUARE FEET
STA	STATION
SY	SQUARE YARD
TBD	TO BE DETERMINED
(TYP)	TYPICAL
U/S	UPSTREAM
UG	UNDERGROUND
UTL	UTILITY
VERT	VERTICAL
VLF	VERTICAL LINEAR FEET
W	WEST

ABBREVIATIONS

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY

NOTES

1. DISPLAYED TIDAL DATUMS ARE FROM NOAA TIDAL STATION 9447130 (SEATTLE) WITH SUBORDINATE STATION CORRECTION FACTOR APPLIED.
2. THE RELATIONSHIPS BETWEEN GEODETIC AND TIDAL DATUMS WERE COMPUTED FROM NOAA TIDAL BENCH 9447427 (EDMONDS).
3. ALL ELEVATIONS IN PLAN SET ARE IN NAVD88 UNLESS OTHERWISE NOTED.

NAVD	MLLW	
11.93	14.21	HIGHEST EST TIDE
8.71	10.99	MHHW
7.86	10.14	MHW
4.20	6.48	MTL
0.54	2.82	MLW
-2.28	0.00	MLLW

NAVD + 2.28 = MLLW

TIDAL DATUM ELEVATIONS

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON
U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

QUANTITIES, GENERAL NOTES, LEGEND, AND ABBREVIATIONS

KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE:	PLATE
D			JUNE 2003	G2
DSGN. IGP		CHK. YHC	SHEET 2	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY

GENERAL NOTES

1. SOUTH KINGSTON BRIDGE SHALL BE CONSTRUCTED IN TWO PHASES IN ORDER TO MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC AT ALL TIMES
2. WEST KINGSTON ROAD MAY BE CLOSED TO THROUGH TRAFFIC FOR DURATION OF WEST KINGSTON BRIDGE CONSTRUCTION
3. CONTRACTOR SHALL SUBMIT CONSTRUCTION SEQUENCE PLAN FOR REVIEW BY ENGINEER

SUGGESTED CONSTRUCTION SEQUENCE
SOUTH KINGSTON ROAD

-INSTALL TRAFFIC SIGNS, TEMPORARY SIGNALS AND TRAFFIC CONTOL MEASURES
-INSTALL BARRIERS AND SAFETY MEASURES TO ROUTE TRAFFIC TO NORTH BOUND LANE
-CLOSE SOUTH BOUND LANE TO TRAFFIC
-PREPARE SOUTH BOUND LANE FOR CAISSON DRILLING
-DRILL CAISSON FOUNDATION AT EACH LOCATION FOR SOUTH BOUND LANE
-INSTALL STEEL CASING IN BOTH DRILL HOLES TO APPROXIMATELY 1-FOOT BELOW ROADWAY SURFACE
-EXPORT AND DISPOSE OF UN-SUITABLE MATERIAL
-PLACE REINFORCING STEEL CAGE IN BOTH CAISSON DRILL HOLES
-POUR STRUCTURE CONCRETE UP TO BOTTOM OF ABUTMENT CAP
-FILL THE REST OF THE DRILL HOLES WITH CONTROL DENSITY FILL (CDF) MATERIAL TO THE ROADWAY SURFACE, COVER WITH STEEL PLATE AS REQUIRED
-MODIFY TRAFFIC SIGNS, TEMPORARY SIGNALS AND TRAFFIC CONTOL MEASURES TO ROUTE TRAFFIC BACK TO SOUTH BOUND LANE
-ROUTE TRAFFIC TO SOUTH BOUND LANE AND CLOSE NORTH BOUND LANE
-INSTALL TEMPORARY COFFERDAM, SILT FENCE AND EROSION CONTROL MEASURES AROUND NEW STORM DRAIN OUTFALL CONSTRUCTION AREA
-INSTALL NEW STORM DRAIN MANHOLE, PIPE AND OUTFALL AT LOW TIDE
-PREPARE NORTH BOUND LANE FOR CAISSON DRILLING
-DRILL CAISSON FOUNDATION AT EACH LOCATION FOR NORTH BOUND LANE
-INSTALL STEEL CASING IN BOTH DRILL HOLES TO APPROXIMATELY 1-FOOT BELOW ROADWAY SURFACE
-EXPORT AND DISPOSE OF UN-SUITABLE MATERIAL
-PLACE REINFORCING STEEL CAGE IN BOTH CAISSON DRILL HOLES
-POUR STRUCTURE CONCRETE UP TO BOTTOM OF ABUTMENT CAP
-FILL THE REST OF THE DRILL HOLES WITH CONTROL DENSITY FILL (CDF) MATERIAL TO THE ROADWAY SURFACE, COVER WITH STEEL PLATE AS REQUIRED
-INSTALL COFFERDAM, SILT FENCING AND EROSION CONTROL MEASURES AROUND BRIDGE CONSTRUCTION AREA ON BOTH SIDES OF THE ROADWAY AT LOW TIDE, UTILIZE EXISTING CULVERT AS BYPASS
-INSTALL SHORING ALONG CENTER OF ROADWAY AS REQUIRED, UTILIZE SHALLOW SHORING MEASURES AT EXISTING CULVERT
-EXCAVATE NORTH BOUND LANE EMBANKMENT WITHIN COFFERDAM
-DEWATER CONSTRUCTION SITE WITH PUMPS AND DESILTING MEASURES
-EXPORT AND DISPOSE OF UN-SUITABLE MATERIAL OR EXCESS
-DEMOLISH AND DISPOSE OF EXISTING STORM DRAIN MANHOLE, PIPE, AND OUTFALL
-MODIFY SHORING AT CAISSON FOUNDATION TO ACCOMMODATE REINFORCING STEEL REQUIRED FOR CAISSON AND ABUTMENT CAP
-SET FORMS AND REINFORCING STEEL FOR ABUTMENT CAP AND POUR STRUCTURE CONCRETE
-DEMOLISH TOP SECTION OF EXISTING BOX CULVERT UNDER NORTH BOUND LANE FOR GIRDER CLEARANCE, BRACE INTERNALLY AS REQUIRED
-CONSTRUCT CHANNEL IMPROVEMENTS AND PLACE CHANNEL PROTECTION AT BRIDGE FOUNDATIONS AND ROADWAY EMBANKMENTS UNDER AND AROUND NORTH BOUND LANE, WITHIN COFFERDAM
-CONSTRUCT CHANNEL IMPROVEMENTS AND PLACE CHANNEL PROTECTION AT BRIDGE FOUNDATION AND AND ROADWAY EMBANKMENTS OUTSIDE OF COFFERDAM AT LOW TIDE
-MULCH ALL BARE SURFACES AND EMBANKMENTS WITHIN 48 HOURS OF FINAL GRADING
-INSTALL BEARING PADS AND CONCRETE GIRDERS ON NORTH BOUND LANE
-RELOCATE UTILITIES TO BRIDGE AS REQUIRED
-INSTALL BRIDGE CONNECTIONS, DIAPHRAGMS, AND OUTSIDE TRAFFIC BARRIER ON NORTH BOUND LANE
-CONSTRUCT NORTH BOUND ROADWAY APPROACHES TO BRIDGE
-INSTALL MEDIAN BARRIER AND SAFETY MEASURES ON ROAD AND BRIDGE
-MODIFY TRAFFIC SIGNS, TEMPORARY SIGNALS AND TRAFFIC CONTOL MEASURES
-ROUTE TRAFFIC TO NORTH BOUND LANE AND CLOSE SOUTH BOUND LANE
-MODIFY SHORING AT ROADWAY APPROACHES AND AT CAISSON FOUNDATION TO ACCOMMODATE FORMS FOR CAISSON AND ABUTMENT CAP
-EXCAVATE SOUTH BOUND LANE EMBANKMENT WITHIN COFFERDAM
-REMOVE SHORING BETWEEN ABUTMENT CAPS
-EXPORT AND DISPOSE OF UN-SUITABLE MATERIAL OR EXCESS
-SET FORMS AND REINFORCING STEEL FOR ABUTMENT CAP AND POUR STRUCTURE CONCRETE
-DEMOLISH TOP SECTION OF EXISTING BOX CULVERT UNDER SOUTH BOUND LANE FOR GIRDER CLEARANCE, BRACE INTERNALLY AS REQUIRED
-CONSTRUCT CHANNEL IMPROVEMENTS AND PLACE CHANNEL PROTECTION AT BRIDGE FOUNDATIONS AND ROADWAY EMBANKMENTS UNDER AND AROUND SOUTH BOUND LANE, WITHIN COFFERDAM
-CONSTRUCT CHANNEL IMPROVEMENTS AND PLACE CHANNEL PROTECTION AT BRIDGE FOUNDATION AND ROADWAY EMBANKMENTS OUTSIDE OF COFFERDAM AT LOW TIDE
-MULCH ALL BARE SURFACES AND EMBANKMENTS WITHIN 48 HOURS OF FINAL GRADING
-INSTALL BEARING PADS AND CONCRETE GIRDERS ON SOUTH BOUND LANE
-RELOCATE UTILITIES TO BRIDGE AS REQUIRED
-INSTALL BRIDGE CONNECTIONS, DIAPHRAGMS, AND OUTSIDE TRAFFIC BARRIER ON SOUTH BOUND LANE
-REMOVE REMAINING SHORING MEASURES
-CONSTRUCT SOUTH BOUND ROADWAY APPROACHES TO BRIDGE
-REMOVE MEDIAN BARRIER AND SAFETY MEASURES ON ROAD AND BRIDGE
-PROVIDE TRAFFIC CONTROL AS REQUIRED TO FINISH ROADWAY AND CHANNEL IMPROVEMENTS
-PLACE FINAL ASPHALT TO ROADWAY APPROACHES AND BRIDGE GIRDERS
-RE-STRIP ROADWAY
-REMOVE ALL WASTE MATERIAL FROM SITE
-REMOVE DEWATERING MEASURES AND COFFERDAM AT LOW TIDE
-DEMOLISH AND DISPOSE OF REMAINING BOX CULVERT
-CONSTRUCT FINAL GRADING IMPROVEMENTS UNDER BRIDGE AT LOW TIDE
-MODIFY SILT FENCING FOR FILLING SCOUR HOLE IMPROVEMENTS AT LOW TIDE
-IMPORT SUITABLE MATERIAL TO FILL SCOUR HOLES TO WITHIN 5' OF FINISHED GRADE AT LOW TIDE
-EXCAVATE SEDIMENT DEPOSITS AROUND UPSTREAM SCOUR HOLE AND PLACE IN SCOUR HOLE TO FILL REMAINING PORTION UP TO FINISHED GRADE
-REVEGETATE ROADWAY EMBANKMENTS
-REMOVE TRAFFIC SIGNS, TEMPORARY SIGNALS AND TRAFFIC CONTOL MEASURES
-ROUTE TRAFFIC BACK TO BOTH LANES

SUGGESTED CONSTRUCTION SEQUENCE
WEST KINGSTON ROAD

-INSTALL TRAFFIC SIGNS AND TRAFFIC CONTOL MEASURES
-DETOUR TRAFFIC AND CLOSE ROADWAY TO TRAFFIC
-INSTALL COFFERDAM, SILT FENCING AND EROSION CONTROL MEASURES AROUND BRIDGE CONSTRUCTION AREA ON BOTH SIDES OF THE ROADWAY AT LOW TIDE
-EXCAVATE ROADWAY EMBANKMENT, DEMOLISH AND DISPOSE OF EXISTING CONCRETE CULVERT
-INSTALL BYPASS PIPE THROUGH EXCAVATED ROADWAY EMBANKMENT
-DEWATER CONSTRUCTION SITE WITH PUMPS AND DESILTING MEASURES
-EXCAVATE EMBANKMENT AND PREPARE FOR PILE DRIVING BOTH FOUNDATIONS
-EXPORT AND DISPOSE OF EXCESS MATERIAL
-MULCH ALL BARE SURFACES AND EMBANKMENTS WITHIN 48 HOURS OF FINAL GRADING
-DRIVE PILES FOR BOTH FOUNDATIONS
-SET FORMS AND REINFORCING STEEL FOR PILE CAPS AND POUR STRUCTURE CONCRETE
-CONSTRUCT TEMPORARY ACCESS ROAD TO THE HISTORIC ROADBED LOCATION
-EXCAVATE HISTORIC ROADBED AT LOW TIDE
-EXPORT AND DISPOSE OF EXCESS MATERIAL
-REMOVE TEMPORARY ACCESS ROAD
-CONSTRUCT CHANNEL IMPROVEMENTS AND PLACE CHANNEL PROTECTION AT BRIDGE FOUNDATIONS AND ROADWAY EMBANKMENTS
-INSTALL BEARING PADS AND CONCRETE GIRDERS
-RELOCATE UTILITIES TO BRIDGE AS REQUIRED
-INSTALL BRIDGE CONNECTIONS, DIAPHRAGMS, AND OUTSIDE TRAFFIC BARRIERS
-CONSTRUCT ROADWAY APPROACHES TO BRIDGE
-PLACE FINAL ASPHALT TO ROADWAY APPROACHES AND BRIDGE GIRDERS
-RE-STRIP ROADWAY
-REMOVE ALL WASTE MATERIAL FROM SITE
-CONSTRUCT FINAL GRADING IMPROVEMENTS UNDER BRIDGE
-REMOVE DEWATERING MEASURES, BYPASS PIPES AND COFFERDAM AT LOW TIDE
-REVEGETATE ROADWAY EMBANKMENTS, TEMPORARY ACCESS ROAD, HISTORIC ROADBED AND AREA SOUTH OF ROADWAY
-REMOVE TRAFFIC SIGNS AND TRAFFIC CONTOL MEASURES
-ROUTE TRAFFIC BACK TO ROAD

SUGGESTED CONSTRUCTION SEQUENCE
LARGE WOODY DEBRIS

-PLACE LARGE WOODY DEBRIS FROM ROADWAY TRANSPORT INTO ESTUARY AT HIGH TIDE
-FLOAT LARGE WOODY DEBRIS TO PLACEMENT LOCATION
-INSTALL DUCKBILL ANCHORS AND CONNECT TO LARGE WOODY DEBRIS WITH CABLES

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON
U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

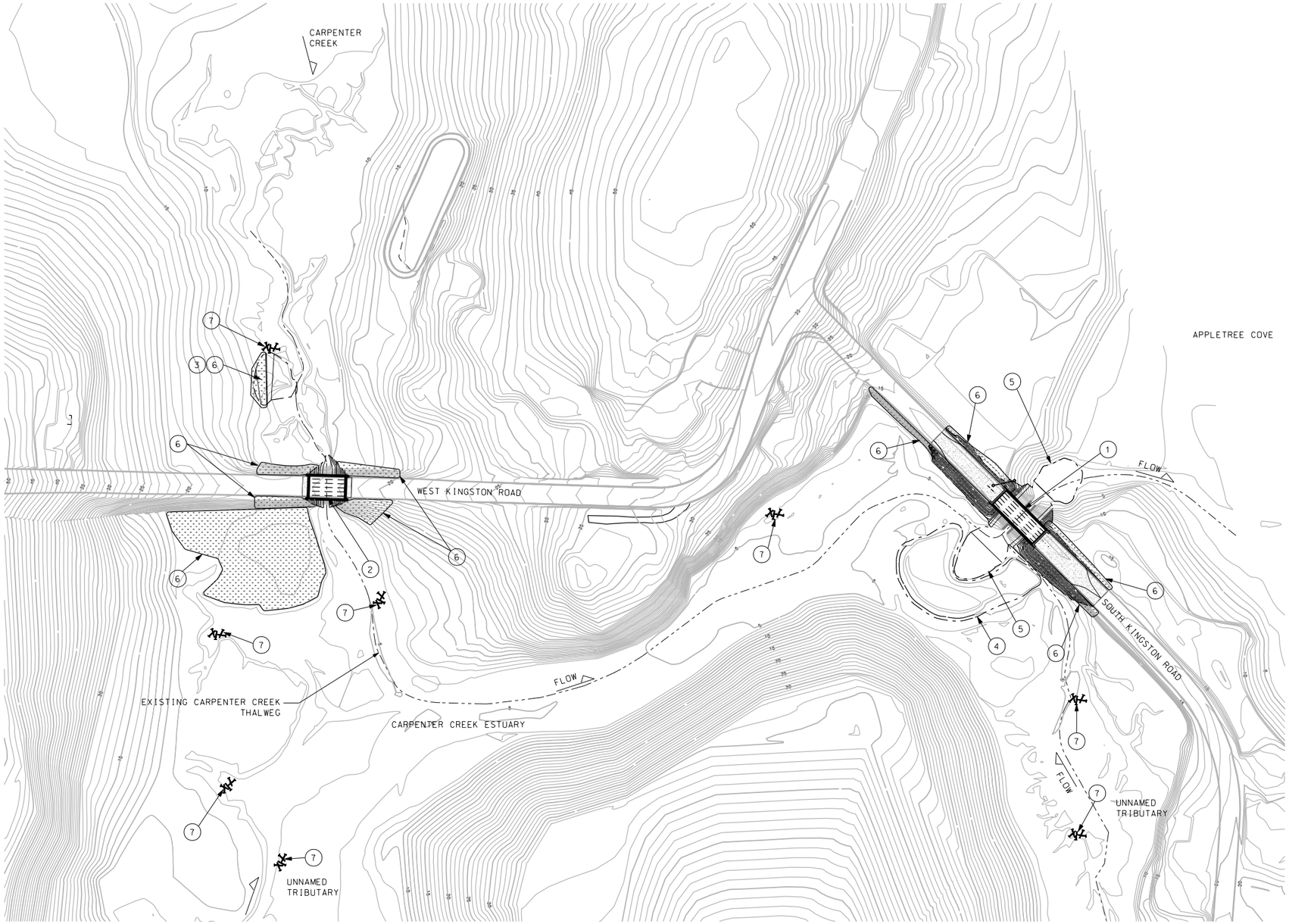
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

CONSTRUCTION SEQUENCE NOTES

KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE:	PLATE
D			JUNE 2003	G3
DSGN. IGP		CHK. YHC	SHEET 3	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



PROJECT MEASURES

1. SOUTH KINGSTON ROAD CULVERT REPLACEMENT WITH SINGLE SPAN BRIDGE AND ROAD IMPROVEMENTS
2. WEST KINGSTON ROAD CULVERT REPLACEMENT WITH SINGLE SPAN BRIDGE AND ROAD IMPROVEMENTS
3. HISTORIC ROADWAY EMBANKMENT EXCAVATION
4. SEDIMENT EXCAVATION
5. FILL IN SCOUR HOLES AT SOUTH KINGSTON ROAD
6. PLANTING
7. LARGE WOODY DEBRIS

N

PLAN

SCALE: 50 0 50 100 200

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

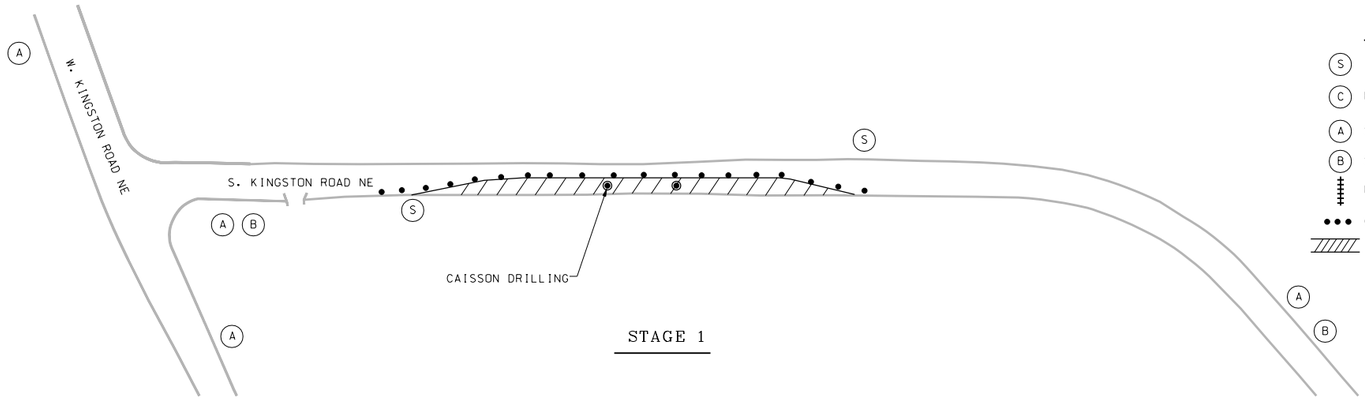
U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

CARPENTER CREEK ESTUARY SECTION 206 RESTORATION PROJECT

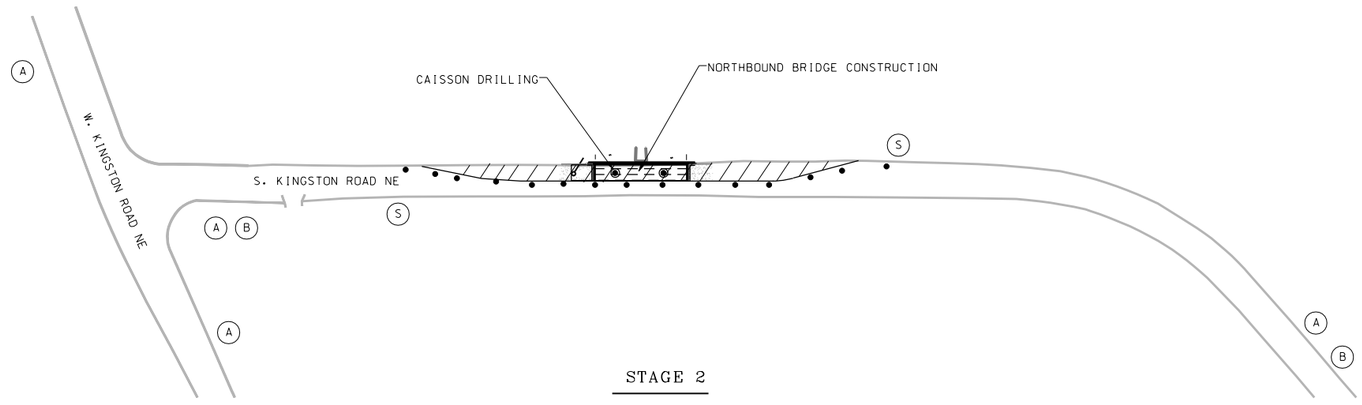
SITE PLAN PROJECT MEASURES

KITSAP COUNTY, WASHINGTON

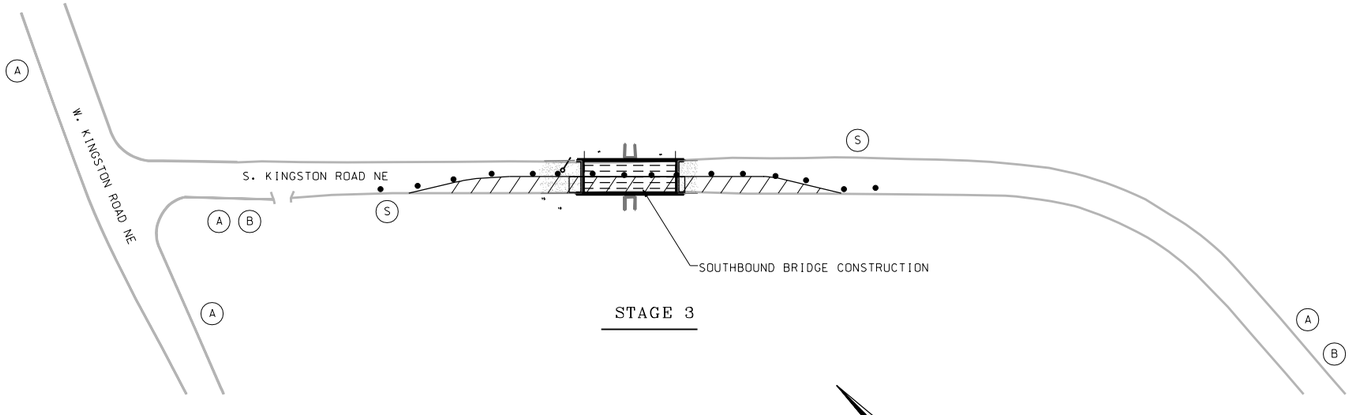
SIZE	INVITATION NO.	FILE NO.	DATE	PLATE
D			JUNE 2003	G4
DSGN. IGP		CHK. YHC	SHEET 4	



STAGE 1



STAGE 2



STAGE 3

PLAN

SCALE: 80 0 80 40

LEGEND

- (S) TEMPORARY SIGNAL
- (C) ROAD CLOSED SIGN
- (A) SINGLE LANE AHEAD
- (B) SIGNAL AHEAD
- BARRICADE
- CONES WITH REFLECTOR
- LANE CLOSED

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY

TRAFFIC CONTROL GENERAL NOTES

1. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO THE LATEST TRAFFIC MANUAL
2. ALL SIGNING AND STRIPING SHALL CONFORM TO THE LATEST TRAFFIC MANUAL STANDARD PLANS AND SPECIFICATIONS AND THE KITSAP COUNTY GUIDELINES
3. CONSTRUCTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES. ALL PRIVATE DRIVEWAYS AND SIDE STREETS SHALL BE KEPT OPEN AT ALL TIMES EXCEPT WHEN CONSTRUCTION TAKES PLACE DIRECTLY IN FRONT OF THE DRIVEWAY/SIDE STREET. ALL OPEN EXCAVATIONS ON PUBLIC STREETS SHALL BE BACK-FILLED OR STEEL-PLATED (ANTI-SKID PLATES) FOR TRAFFIC TO THE SATISFACTION OF COUNTY ENGINEER OUTSIDE THE WORKING HOURS. TRAFFIC SHALL BE RESTORED TO NORMAL CONDITIONS DURING NON-WORKING HOURS.
4. ALL SIGNS SHALL BE REFLECTORIZED AND STANDARD SIZE.
5. CONSTRUCTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. WHEN CONSTRUCTION IS NOT BEING PERFORMED, ALL ROADWAYS SHALL BE RETURNED TO THEIR FULL TRAFFIC USAGE BY PLATING OR BACKFILLING THE OPEN TRENCHES, AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES USED FOR TRAFFIC CONTROL OR DETOUR.
7. ALL TUBULAR DELINEATORS SHALL BE 36" MINIMUM HEIGHT AND CONES SHALL BE 28" MINIMUM HEIGHT AND SHALL INCLUDE 12" HIGH INTENSITY REFLECTORIZED SLEEVE.
8. CONSTRUCTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED BY THE KITSAP COUNTY TO ASSURE SAFETY TO THE PUBLIC AT ALL TIMES DURING CONSTRUCTION.
9. NO WORK SHALL BEGIN BEFORE 8:30AM OR CONTINUE AFTER 3:30PM ON ARTERIAL STREETS.
10. NO WORK IS PERMITTED ON SUNDAYS OR HOLIDAYS UNLESS APPROVED BY THE COUNTY ENGINEER.
11. CONSTRUCTOR SHALL RESTORE ANY AND ALL STRIPING, PAVEMENT MARKINGS AND TRAFFIC SIGNAL LOOPS DAMAGED OR REMOVED DURING CONSTRUCTION TO THE SATISFACTION OF THE COUNTY ENGINEER.
12. CONSTRUCTOR SHALL COORDINATE WITH KITSAP COUNTY AT LEAST TWO WORKING DAYS (48 HOURS) PRIOR TO THE STARTING OF TRAFFIC CONTROL DELINEATION.
13. ARROW BOARDS SHALL BE USED ON ANY LANE CLOSURES ON ARTERIAL STREETS.
14. COUNTY ENGINEER RESERVES THE RIGHT TO OBSERVE THESE TRAFFIC CONTROL PLANS IN USE AND TO MAKE ANY NECESSARY CHANGES AS FIELD CONDITIONS WARRANT. ANY CHANGES SHALL SUPERSEDE THESE PLANS. EXACT LOCATION OF ALL EQUIPMENT AND TRAFFIC CONTROL DEVICES SHALL BE DETERMINED BY THE ENGINEER.
15. FOR DELINEATION TO INDICATE THE NEW REQUIRED VEHICLE PATH, USE PRESSURE SENSITIVE TRAFFIC MARKING TAPE AND/OR TYPICAL STRIPING PAINT AND/OR RAISED PAVEMENT MARKERS TO SUPPLEMENT THE CHANNELIZING DEVICES, DELINEATORS, REFLECTORIZED SIGNS, AND BARRICADES. TAPE MARKINGS SHALL CLEARLY REPRESENT LANE MARKING.
16. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.
17. FIVE FOOT CLEARANCE SHALL BE MAINTAINED BETWEEN OPEN EXCAVATION AND ADJACENT MOVING TRAFFIC LANE.
18. CONSTRUCTOR SHALL PROVIDE FLAGGERS AS DEEMED NECESSARY BY ENGINEER.

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

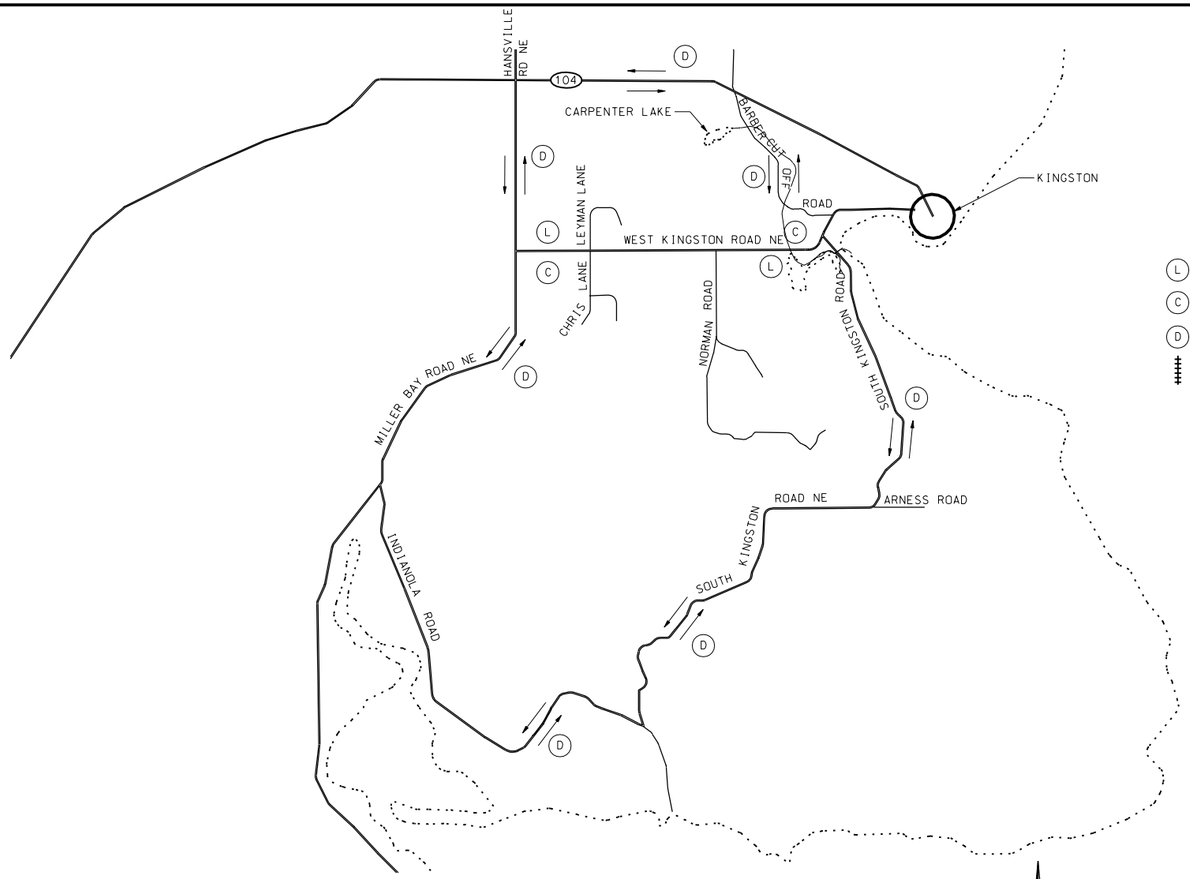
CARPENTER CREEK ESTUARY SECTION 206 RESTORATION PROJECT

TRAFFIC CONTROL PLAN SOUTH KINGSTON ROAD

KITSAP COUNTY, WASHINGTON

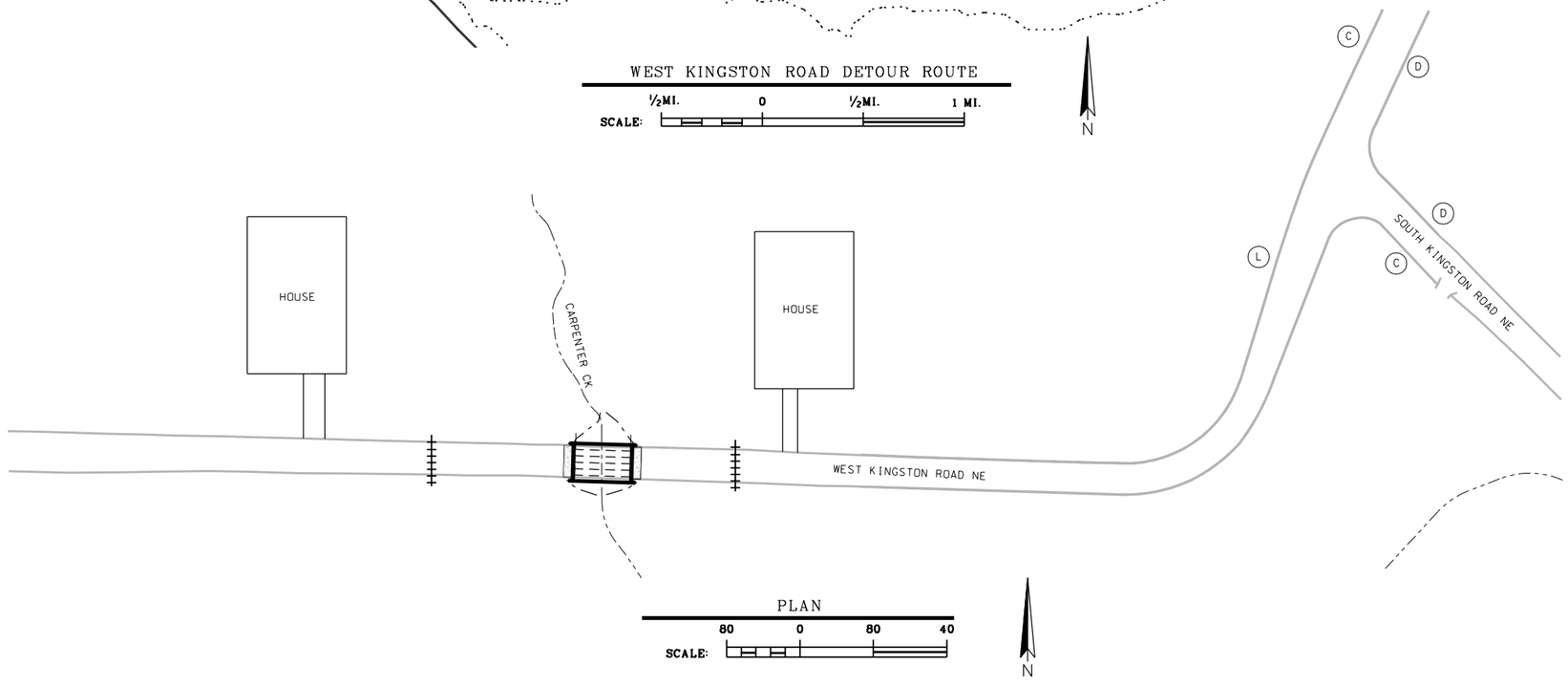
SIZE	INVITATION NO.	FILE NO.	DATE	PLATE
D			JUNE 2003	T1
DSGN. IGP		CHK. YHC	SHEET 5	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



LEGEND

- (L) LOCAL TRAFFIC ONLY SIGN
- (C) ROAD CLOSED AHEAD SIGN
- (D) DETOUR SIGN
- ROAD CLOSURE BARRICADE



TRAFFIC CONTROL GENERAL NOTES

1. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO THE LATEST TRAFFIC MANUAL
2. ALL SIGNING AND STRIPING SHALL CONFORM TO THE LATEST TRAFFIC MANUAL STANDARD PLANS AND SPECIFICATIONS AND THE KITSAP COUNTY GUIDELINES
3. CONSTRUCTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES. ALL PRIVATE DRIVEWAYS AND SIDE STREETS SHALL BE KEPT OPEN AT ALL TIMES EXCEPT WHEN CONSTRUCTION TAKES PLACE DIRECTLY IN FRONT OF THE DRIVEWAY/SIDE STREET. ALL OPEN EXCAVATIONS ON PUBLIC STREETS SHALL BE BACK-FILLED OR STEEL-PLATED (ANTI-SKID PLATES) FOR TRAFFIC TO THE SATISFACTION OF COUNTY ENGINEER OUTSIDE THE WORKING HOURS. TRAFFIC SHALL BE RESTORED TO NORMAL CONDITIONS DURING NON-WORKING HOURS.
4. ALL SIGNS SHALL BE REFLECTORIZED AND STANDARD SIZE.
5. CONSTRUCTOR SHALL HAVE ALL SIGNS, DELINEATORS, BARRICADES, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
6. WHEN CONSTRUCTION IS NOT BEING PERFORMED, ALL ROADWAYS SHALL BE RETURNED TO THEIR FULL TRAFFIC USAGE BY PLATING OR BACKFILLING THE OPEN TRENCHES, AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES USED FOR TRAFFIC CONTROL OR DETOUR.
7. ALL TUBULAR DELINEATORS SHALL BE 36" MINIMUM HEIGHT AND CONES SHALL BE 28" MINIMUM HEIGHT AND SHALL INCLUDE 12" HIGH INTENSITY REFLECTORIZED SLEEVE.
8. CONSTRUCTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED BY THE KITSAP COUNTY TO ASSURE SAFETY TO THE PUBLIC AT ALL TIMES DURING CONSTRUCTION.
9. NO WORK SHALL BEGIN BEFORE 8:30AM OR CONTINUE AFTER 3:30PM ON ARTERIAL STREETS.
10. NO WORK IS PERMITTED ON SUNDAYS OR HOLIDAYS UNLESS APPROVED BY THE COUNTY ENGINEER.
11. CONSTRUCTOR SHALL RESTORE ANY AND ALL STRIPING, PAVEMENT MARKINGS AND TRAFFIC SIGNAL LOOPS DAMAGED OR REMOVED DURING CONSTRUCTION TO THE SATISFACTION OF THE COUNTY ENGINEER.
12. CONSTRUCTOR SHALL COORDINATE WITH KITSAP COUNTY AT LEAST TWO WORKING DAYS (48 HOURS) PRIOR TO THE STARTING OF TRAFFIC CONTROL DELINEATION.
13. ARROW BOARDS SHALL BE USED ON ANY LANE CLOSURES ON ARTERIAL STREETS.
14. COUNTY ENGINEER RESERVES THE RIGHT TO OBSERVE THESE TRAFFIC CONTROL PLANS IN USE AND TO MAKE ANY NECESSARY CHANGES AS FIELD CONDITIONS WARRANT. ANY CHANGES SHALL SUPERSEDE THESE PLANS. EXACT LOCATION OF ALL EQUIPMENT AND TRAFFIC CONTROL DEVICES SHALL BE DETERMINED BY THE ENGINEER.
15. FOR DELINEATION TO INDICATE THE NEW REQUIRED VEHICLE PATH, USE PRESSURE SENSITIVE TRAFFIC MARKING TAPE AND/OR TYPICAL STRIPING PAINT AND/OR RAISED PAVEMENT MARKERS TO SUPPLEMENT THE CHANNELIZING DEVICES, DELINEATORS, REFLECTORIZED SIGNS, AND BARRICADES. TAPE MARKINGS SHALL CLEARLY REPRESENT LANE MARKING.
16. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.
17. FIVE FOOT CLEARANCE SHALL BE MAINTAINED BETWEEN OPEN EXCAVATION AND ADJACENT MOVING TRAFFIC LANE.
18. CONSTRUCTOR SHALL PROVIDE FLAGGERS AS DEEMED NECESSARY BY ENGINEER.

35% DESIGN

TETRA TECH INC.
SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE
CORPS OF ENGINEERS
SEATTLE, WASHINGTON

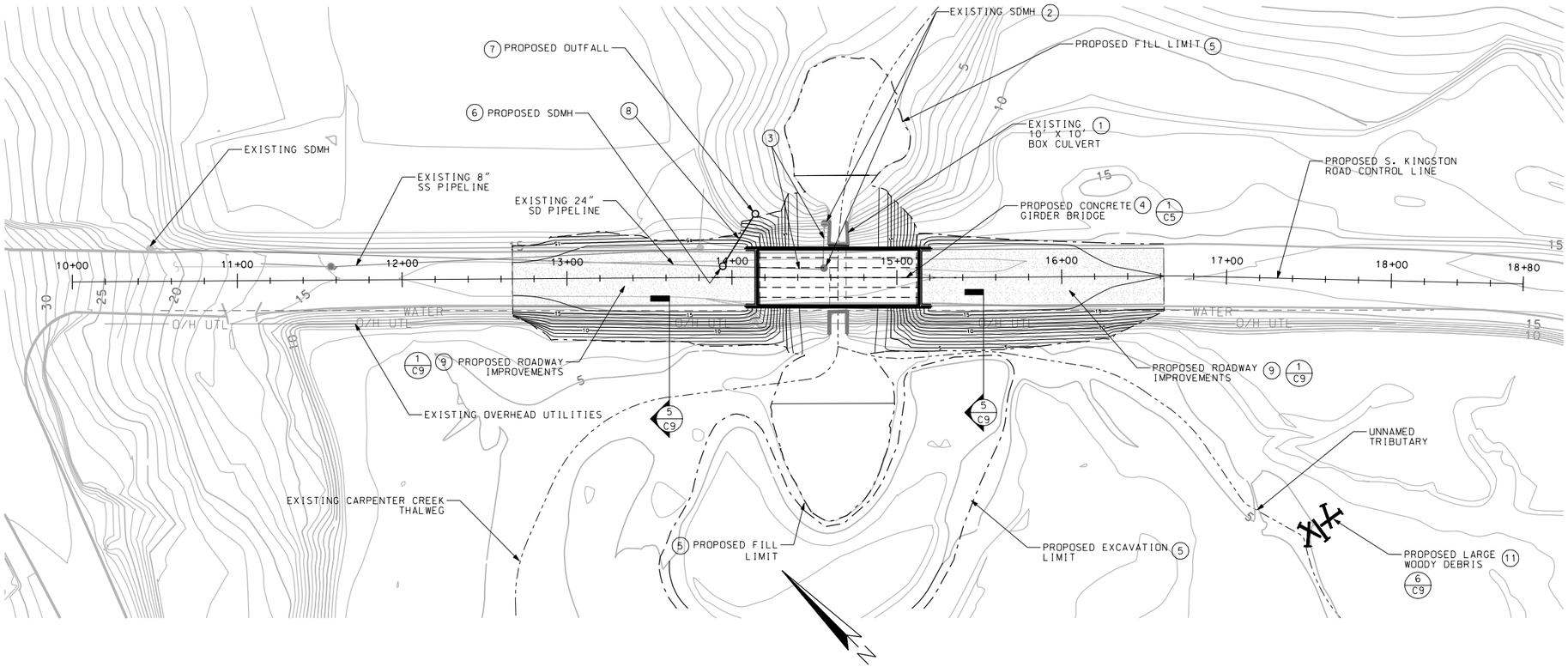
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

TRAFFIC CONTROL PLAN
WEST KINGSTON ROAD

KITSAP COUNTY, WASHINGTON

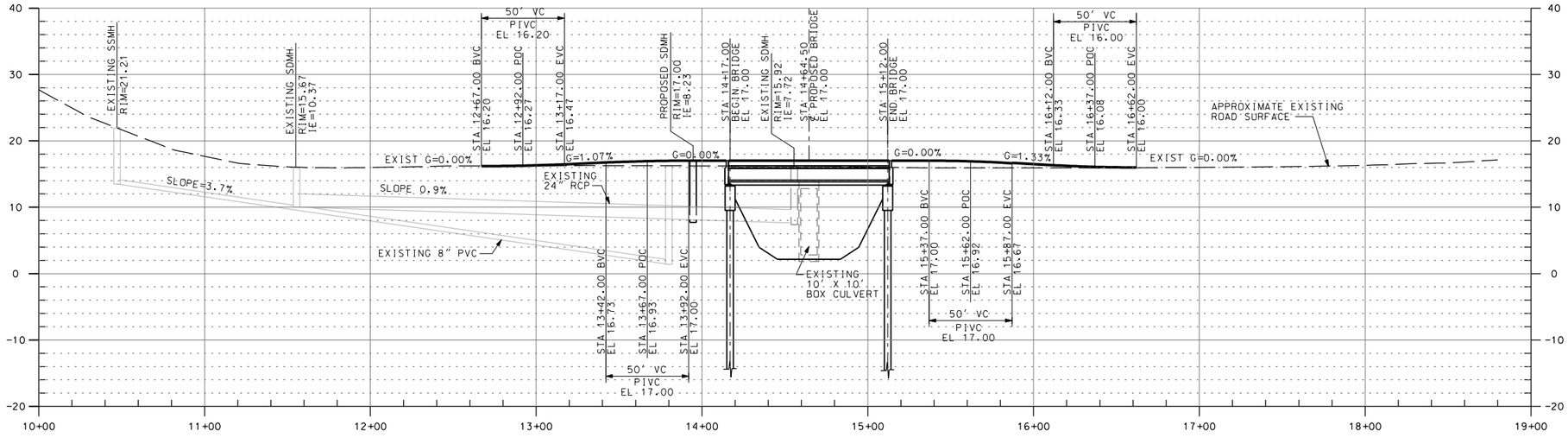
SIZE	INVITATION NO.	FILE NO.	DATE:	PLATE
D			JUNE 2003	T2
DSGN. IGP		CHK. YHC	SHEET 6	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



PLAN

SCALE: 40 0 40 80



PROFILE

SCALE:
1" = 40' (HOR)
1" = 10' (VERT)

CONSTRUCTION NOTES

(1) DEMOLISH AND DISPOSE OF CONCRETE CULVERT
(2) DEMOLISH AND DISPOSE OF STORM DRAIN MANHOLE/OUTFALL
(3) DEMOLISH AND DISPOSE OF STORM DRAIN PIPE
(4) CONSTRUCT CONCRETE GIRDER BRIDGE PER PLAN, PROFILE, SECTIONS, AND DETAILS
(5) CONSTRUCT CHANNEL IMPROVEMENTS PER PLAN, PROFILE AND SECTIONS
(6) CONSTRUCT STORM DRAIN MANHOLE PER KITSAP COUNTY STANDARD PLAN
(7) CONSTRUCT STORM DRAIN OUTFALL PER KITSCAP COUNTY STANDARD PLAN
(8) CONSTRUCT STORM DRAIN PIPE PER PLAN AND PROFILE
(9) CONSTRUCT ROAD IMPROVEMENTS PER PLAN, PROFILE, AND SECTION
(10) RELOCATE UTILITIES TO BRIDGE
(11) CONSTRUCT LARGE WOODY DEBRIS PER PLAN AND DETAIL

35% DESIGN

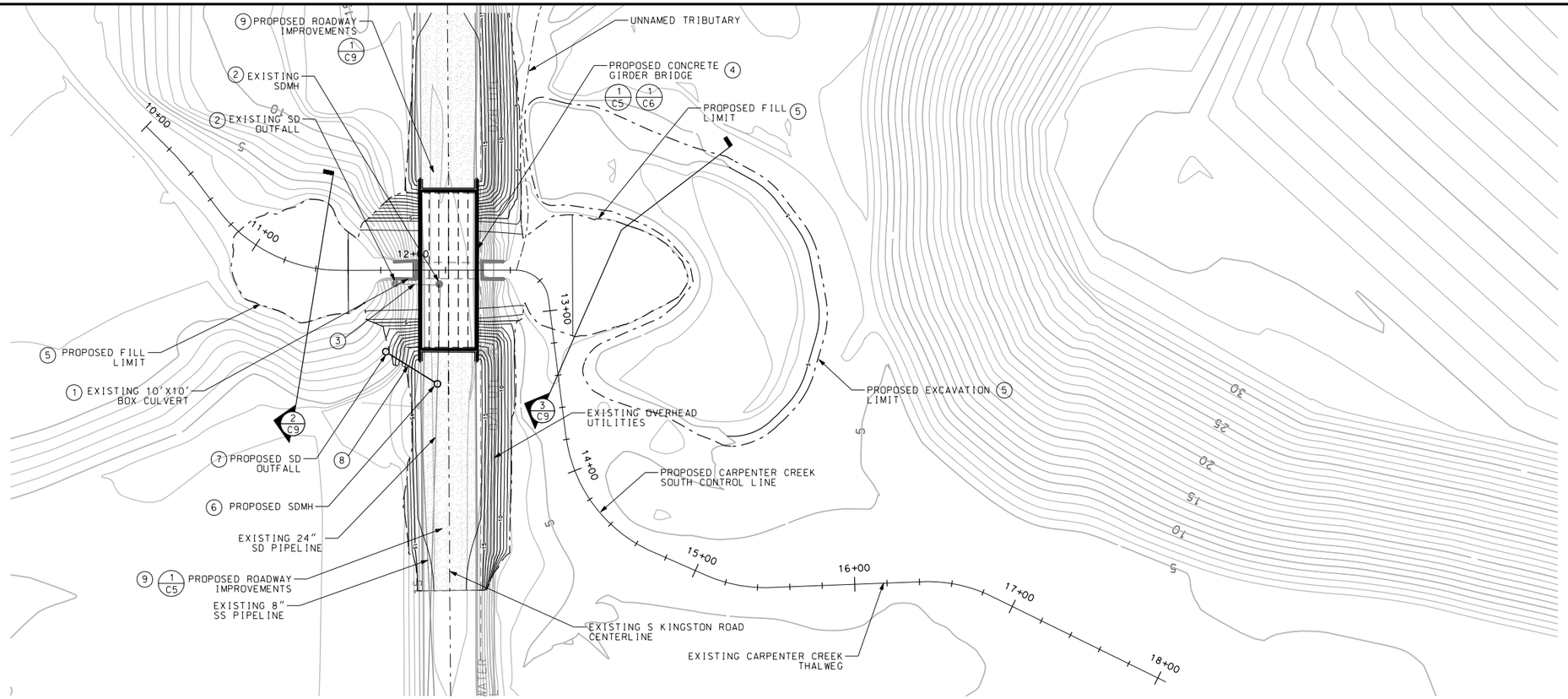
TETRA TECH INC. SEATTLE, WASHINGTON
U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

CARPENTER CREEK ESTUARY SECTION 206 RESTORATION PROJECT

PLAN AND PROFILE SOUTH KINGSTON ROAD

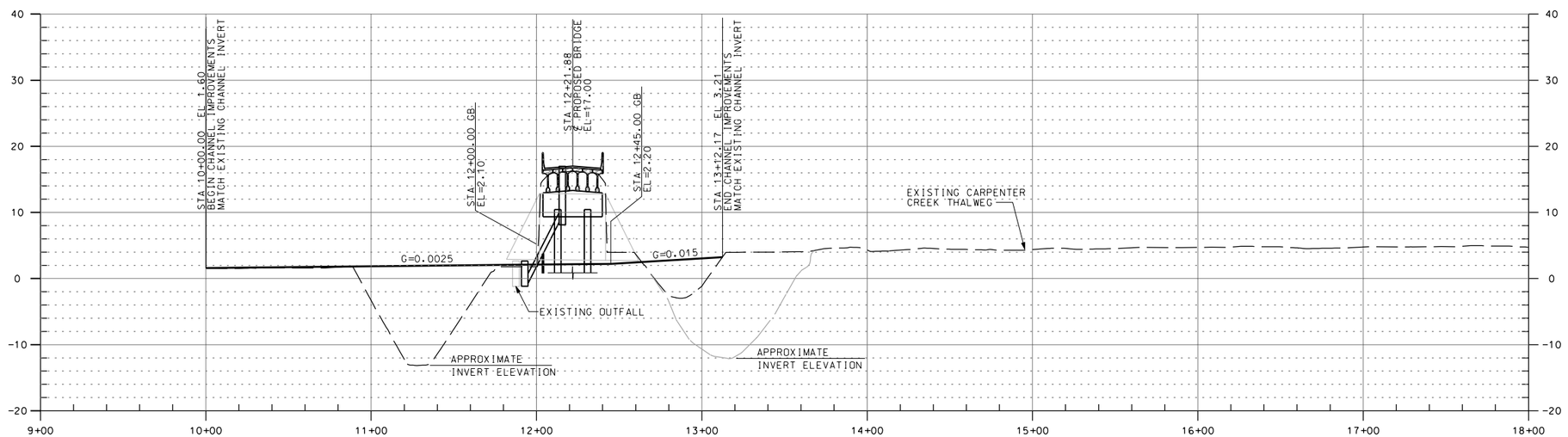
KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE	PLATE
D			JUNE 2003	C1
DSGN. IGP		CHK. YHC	SHEET 7	



PLAN

SCALE: 40 0 40 80



PROFILE

SCALE:
1" = 40' (HOR)
1" = 10' (VERT)

35% DESIGN

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY

CONSTRUCTION NOTES

1. DEMOLISH AND DISPOSE OF CONCRETE CULVERT
2. DEMOLISH AND DISPOSE OF STORM DRAIN MANHOLE/OUTFALL
3. DEMOLISH AND DISPOSE OF STORM DRAIN PIPE
4. CONSTRUCT CONCRETE GIRDER BRIDGE PER PLAN, PROFILE, SECTIONS, AND DETAILS
5. CONSTRUCT CHANNEL IMPROVEMENTS PER PLAN, PROFILE AND SECTIONS
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7. CONSTRUCT STORM DRAIN OUTFALL PER KITSCAP COUNTY STANDARD PLAN
8. CONSTRUCT STORM DRAIN PIPE PER PLAN AND PROFILE
9. CONSTRUCT ROAD IMPROVEMENTS PER PLAN, PROFILE, AND SECTION
10. RELOCATE UTILITIES TO BRIDGE
11. CONSTRUCT LARGE WOODY DEBRIS PER PLAN AND DETAIL

TETRA TECH INC. SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

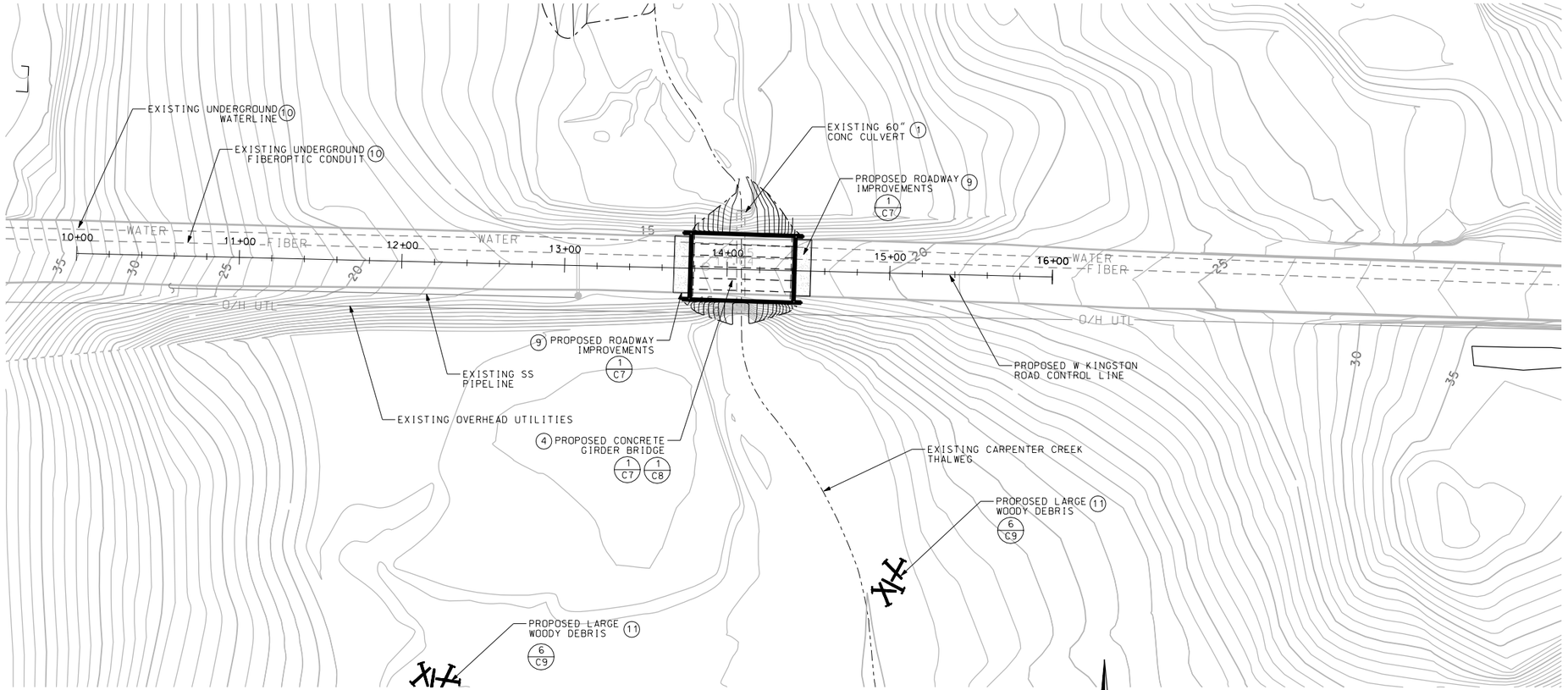
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

PLAN AND PROFILE
CARPENTER CREEK SOUTH

KITSAP COUNTY, WASHINGTON

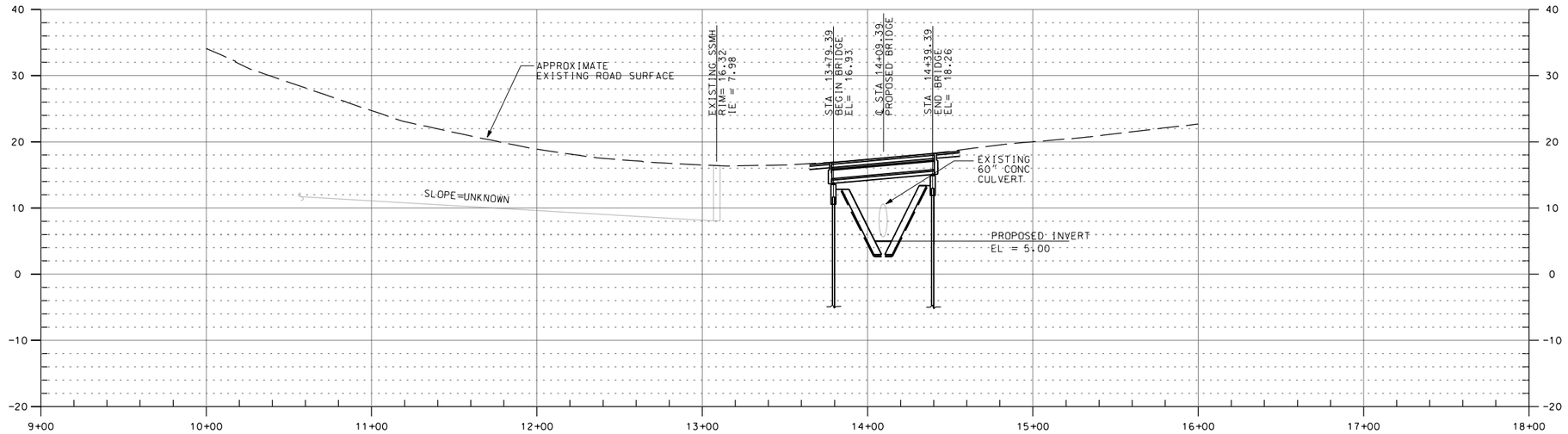
SIZE	INVITATION NO.	FILE NO.	DATE	PLATE
D			JUNE 2003	C2
DSGN. IGP		CHK. YHC	SHEET 8	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



PLAN

SCALE: 40 0 40 80



PROFILE

SCALE:
1" = 40' (HOR)
1" = 10' (VERT)

CONSTRUCTION NOTES

1. DEMOLISH AND DISPOSE OF CONCRETE CULVERT
2. DEMOLISH AND DISPOSE OF STORM DRAIN MANHOLE/OUTFALL
3. DEMOLISH AND DISPOSE OF STORM DRAIN PIPE
4. CONSTRUCT CONCRETE GIRDER BRIDGE PER PLAN, PROFILE, SECTIONS, AND DETAILS
5. CONSTRUCT CHANNEL IMPROVEMENTS PER PLAN, PROFILE AND SECTIONS
6. CONSTRUCT STORM DRAIN MANHOLE PER KITSAP COUNTY STANDARD PLAN
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8. CONSTRUCT STORM DRAIN PIPE PER PLAN AND PROFILE
9. CONSTRUCT ROAD IMPROVEMENTS PER PLAN, PROFILE, AND SECTION
10. RELOCATE UTILITIES TO BRIDGE
11. CONSTRUCT LARGE WOODY DEBRIS PER PLAN AND DETAIL

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

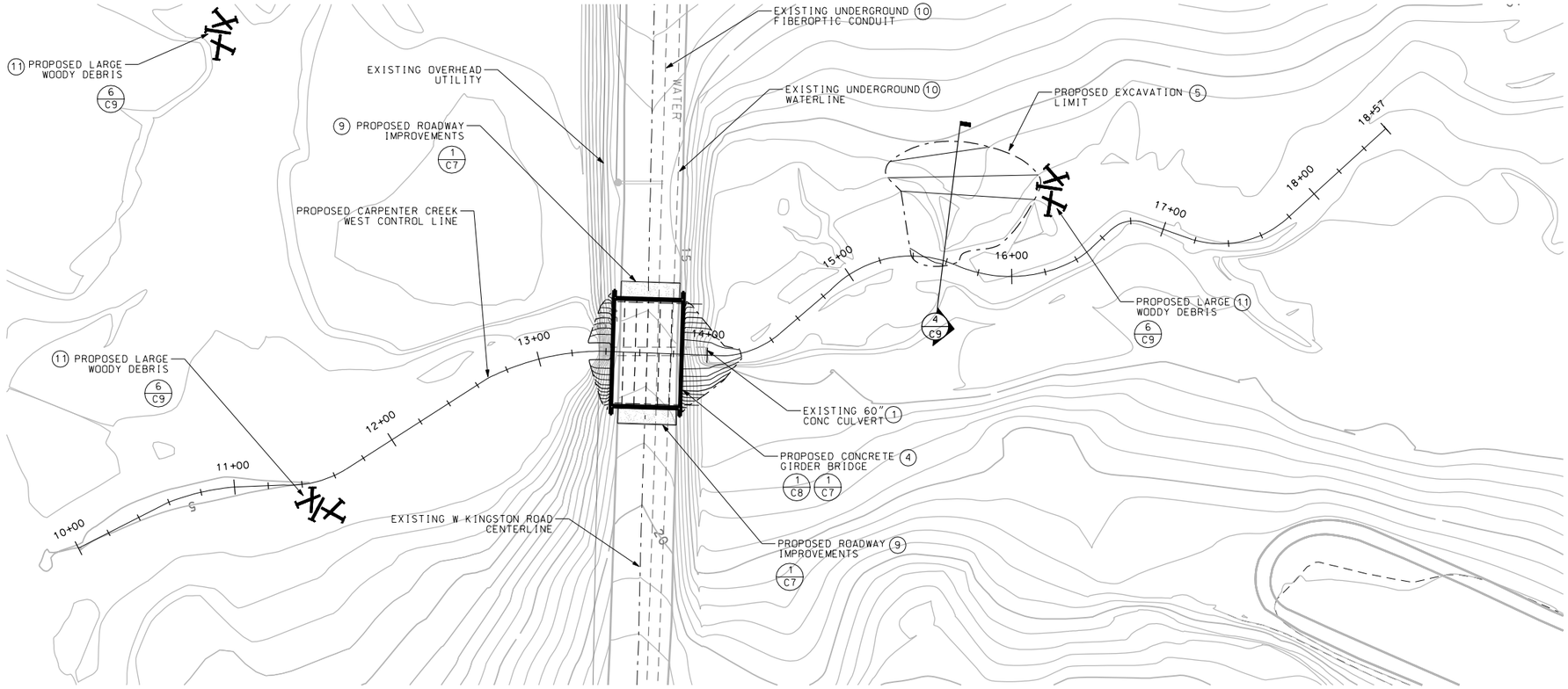
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

PLAN AND PROFILE
WEST KINGSTON ROAD

KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE	PLATE
D			JUNE 2003	C3
DSGN. IGP		CHK. YHC	SHEET 9	

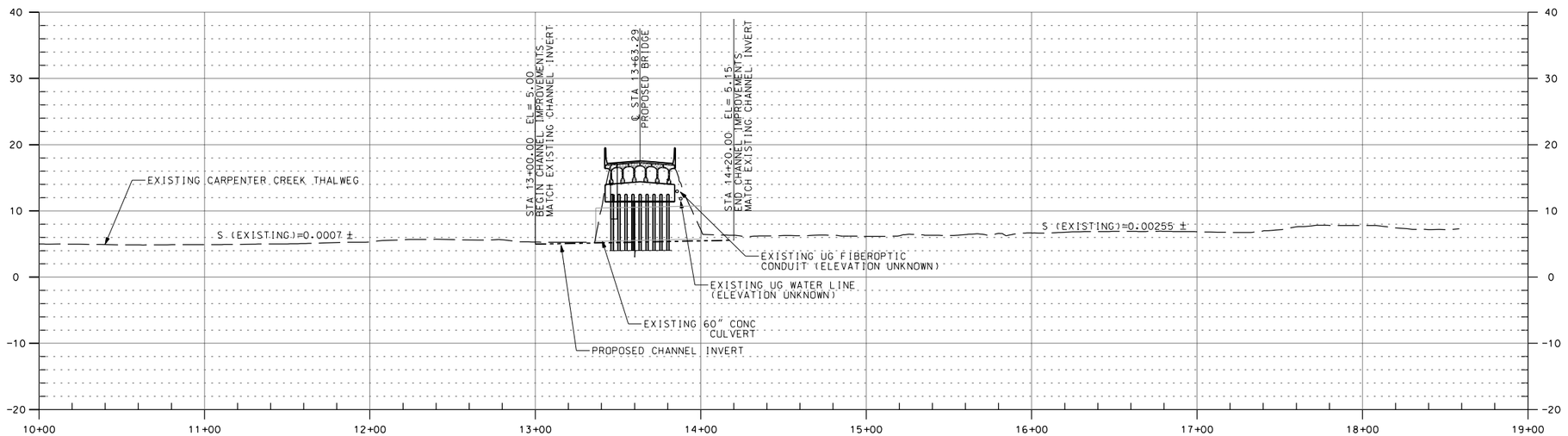
REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



PLAN

N

SCALE: 40 0 40 80



PROFILE

SCALE:
1" = 40' (HOR)
1" = 10' (VERT)

CONSTRUCTION NOTES

1. DEMOLISH AND DISPOSE OF CONCRETE CULVERT
2. DEMOLISH AND DISPOSE OF STORM DRAIN MANHOLE/OUTFALL
3. DEMOLISH AND DISPOSE OF STORM DRAIN PIPE
4. CONSTRUCT CONCRETE GIRDER BRIDGE PER PLAN, PROFILE, SECTIONS, AND DETAILS
5. CONSTRUCT CHANNEL IMPROVEMENTS PER PLAN, PROFILE AND SECTIONS
6. CONSTRUCT STORM DRAIN MANHOLE PER KITSAP COUNTY STANDARD PLAN
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8. CONSTRUCT STORM DRAIN PIPE PER PLAN AND PROFILE
9. CONSTRUCT ROAD IMPROVEMENTS PER PLAN, PROFILE, AND SECTION
10. RELOCATE UTILITIES TO BRIDGE
11. CONSTRUCT LARGE WOODY DEBRIS PER PLAN AND DETAIL

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

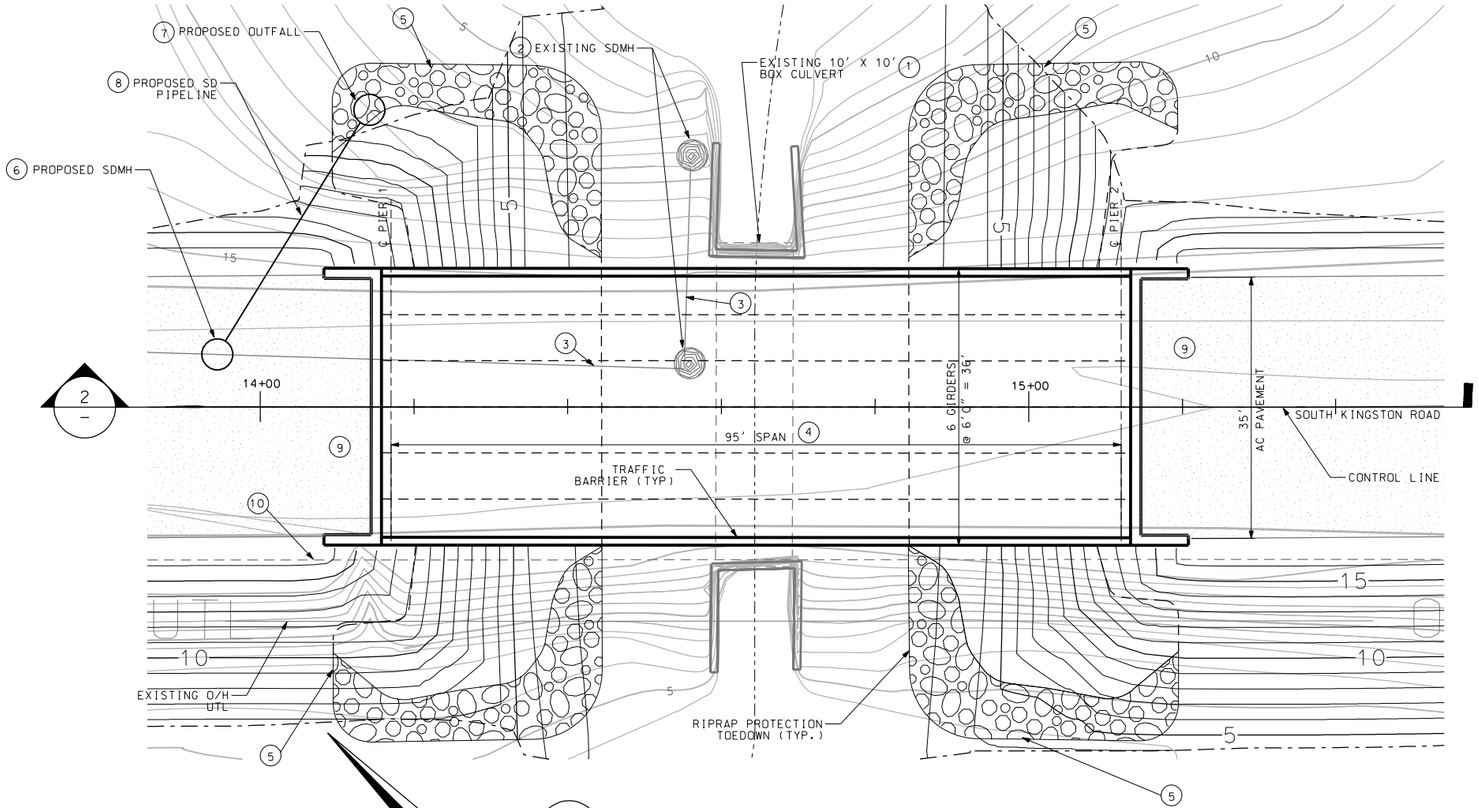
U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

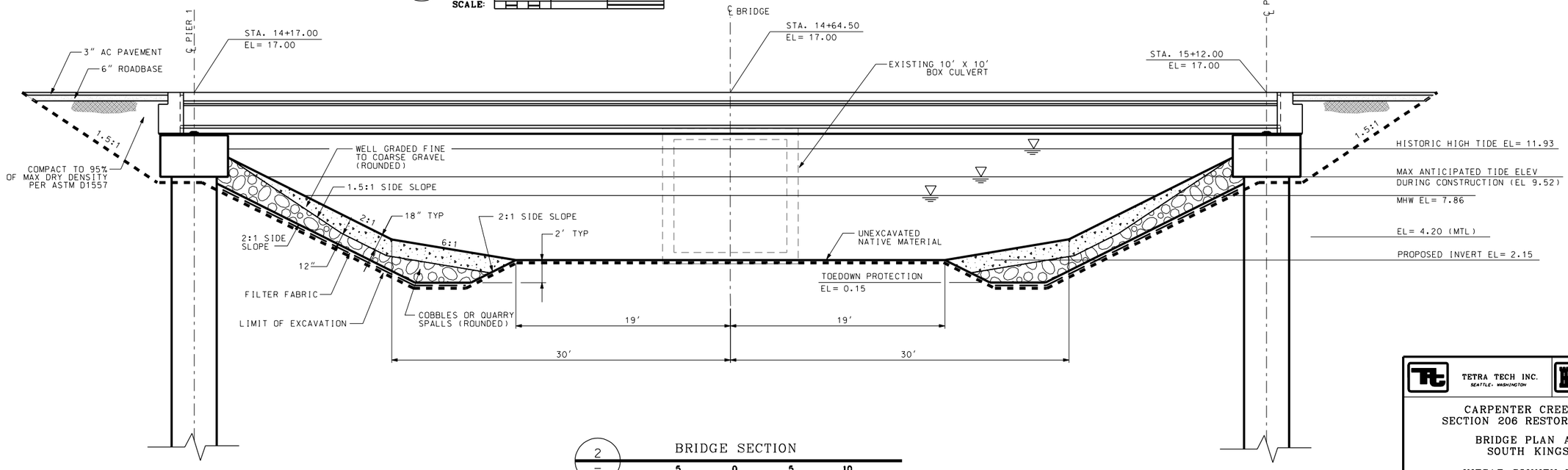
PLAN AND PROFILE
CARPENTER CREEK WEST

KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE:	PLATE
D			JUNE 2003	C4
DSGN. IGP		CHK. YHC	SHEET 10	



1 — PLAN
SCALE: 10 0 10 20



2 — BRIDGE SECTION
SCALE: 5 0 5 10

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY

CONSTRUCTION NOTES

1. DEMOLISH AND DISPOSE OF CONCRETE CULVERT
2. DEMOLISH AND DISPOSE OF STORM DRAIN MANHOLE/OUTFALL
3. DEMOLISH AND DISPOSE OF STORM DRAIN PIPE
4. CONSTRUCT CONCRETE GIRDER BRIDGE PER PLAN, PROFILE, SECTIONS, AND DETAILS
5. CONSTRUCT CHANNEL IMPROVEMENTS PER PLAN, PROFILE AND SECTIONS
6. CONSTRUCT STORM DRAIN MANHOLE PER KITSAP COUNTY STANDARD PLAN
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8. CONSTRUCT STORM DRAIN PIPE PER PLAN AND PROFILE
9. CONSTRUCT ROAD IMPROVEMENTS PER PLAN, PROFILE, AND SECTION
10. RELOCATE UTILITIES TO BRIDGE
11. CONSTRUCT LARGE WOODY DEBRIS PER PLAN AND DETAIL

DESIGN NOTES

1. ALL DESIGNS, MATERIALS, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE OF WASHINGTON DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

2. GIRDERS SHALL BE DESIGNED FOR HS25 LIVE LOADING OR LRFD EQUIVALENT PLUS IMPACT FOR THE FOLLOWING DEAD LOAD:
   - CONCRETE DEAD LOAD OF 160 LBS/CF
   - SUPERIMPOSED DEAD LOAD OF 100 LBS/SF

3. FOUNDATION DESIGN SHALL INCORPORATE THE GEOTECHNICAL INFORMATION AS SPECIFIED IN THE "PRELIMINARY GEOTECHNICAL ENGINEERING SERVICES" OF THE CARPENTER CREEK ESTUARY SECTION 206 FEASIBILITY REPORT, TECHNICAL APPENDIX C.

4. ALL CAISSONS SHALL BE REINFORCED CONCRETE AND SHALL BE DRILLED TO A DEPTH SUFFICIENT TO DEVELOP A MINIMUM LOAD BEARING CAPACITY OF FIVE HUNDRED (500) TONS PER CAISSON.

5. ABUTMENT CAP AND CAISSON SUBSTRUCTURE SHALL BE DESIGNED TO RESIST SEISMIC LATERAL LOADS BASED ON THE RECOMMENDED SEISMIC ACCELERATION FOR THIS SITE OF 0.29g.

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

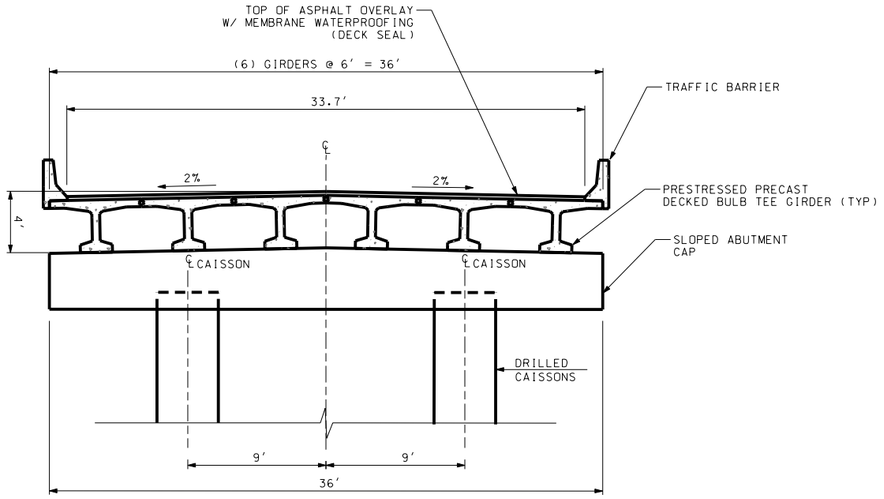
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

BRIDGE PLAN AND SECTION
SOUTH KINGSTON ROAD

KITSAP COUNTY, WASHINGTON

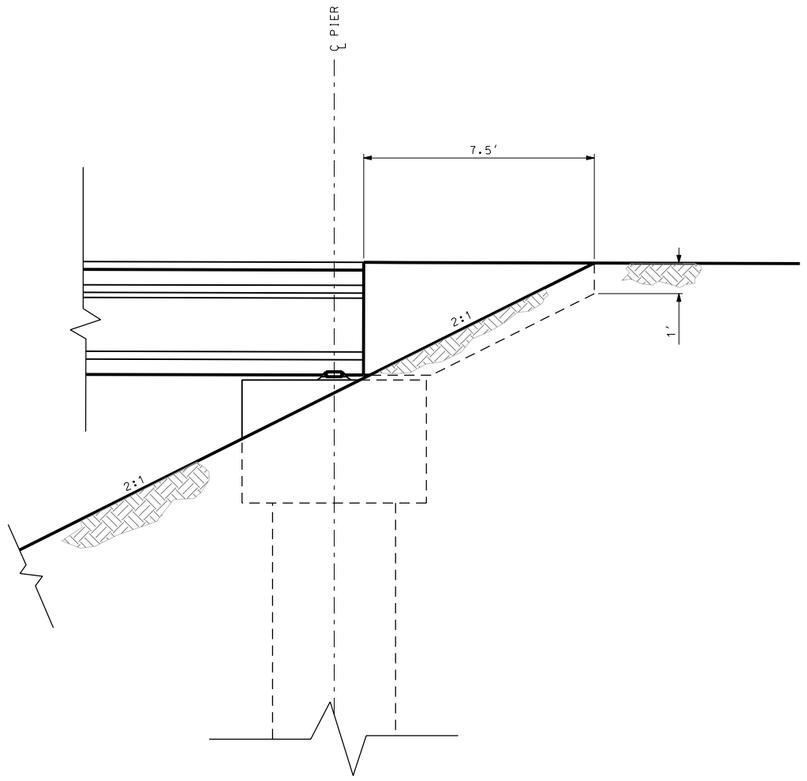
SIZE	INVITATION NO.	FILE NO.	DATE:	PLATE
D			JUNE 2003	C5
DSGN. IGP		CHK. YHC	SHEET 11	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



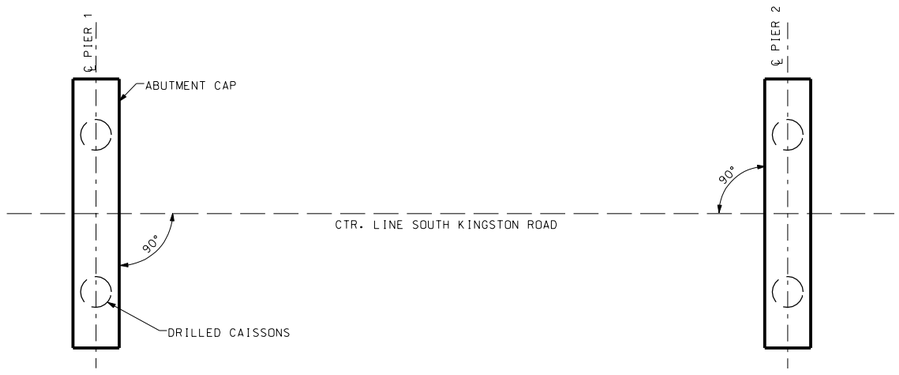
1 — BRIDGE ELEVATION

SCALE: 5 0 5 10



3 — WING WALL

SCALE: 2.5 0 2.5 5



2 — FOUNDATION LAYOUT

SCALE: 5 0 10 20

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

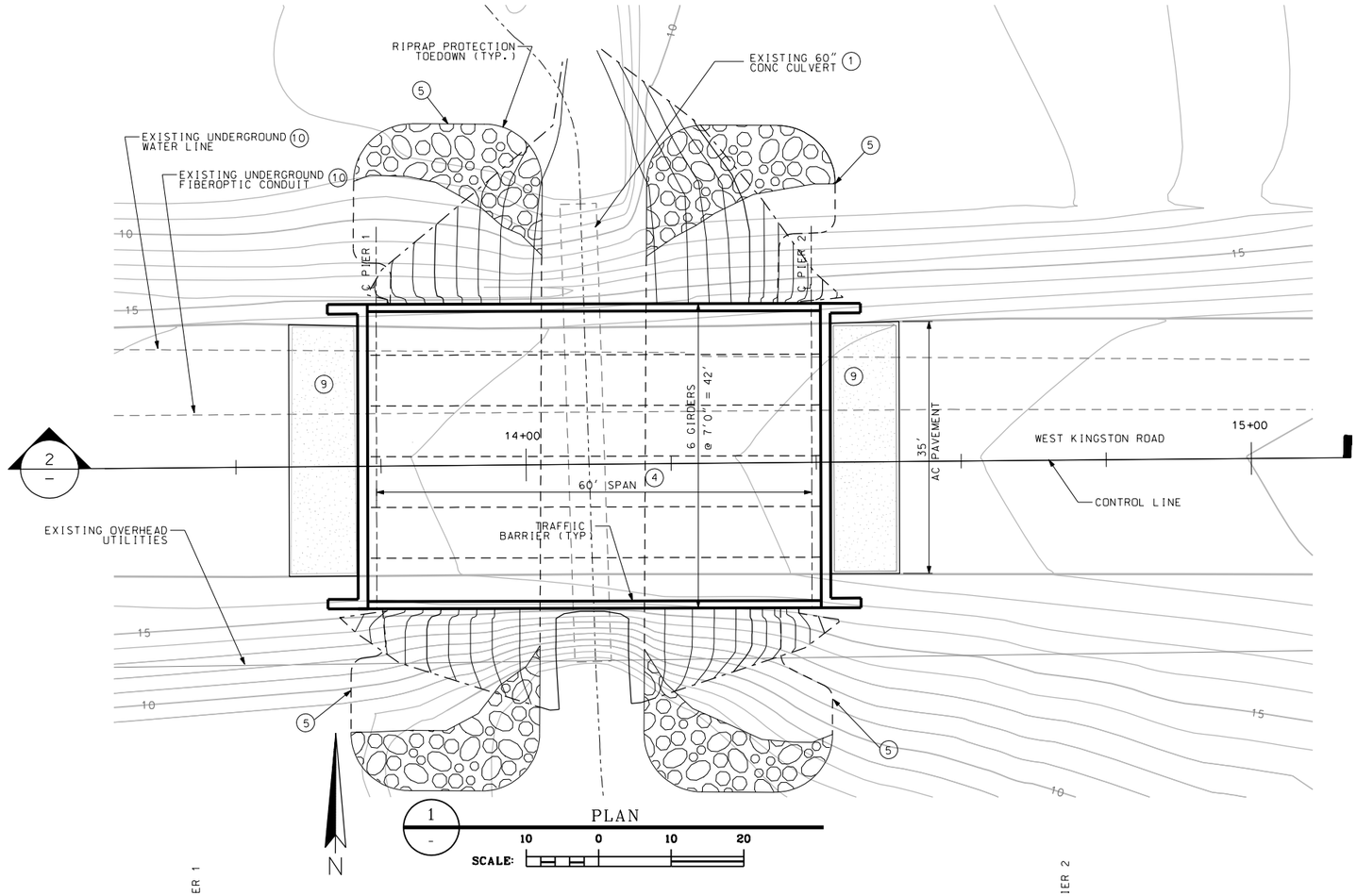
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

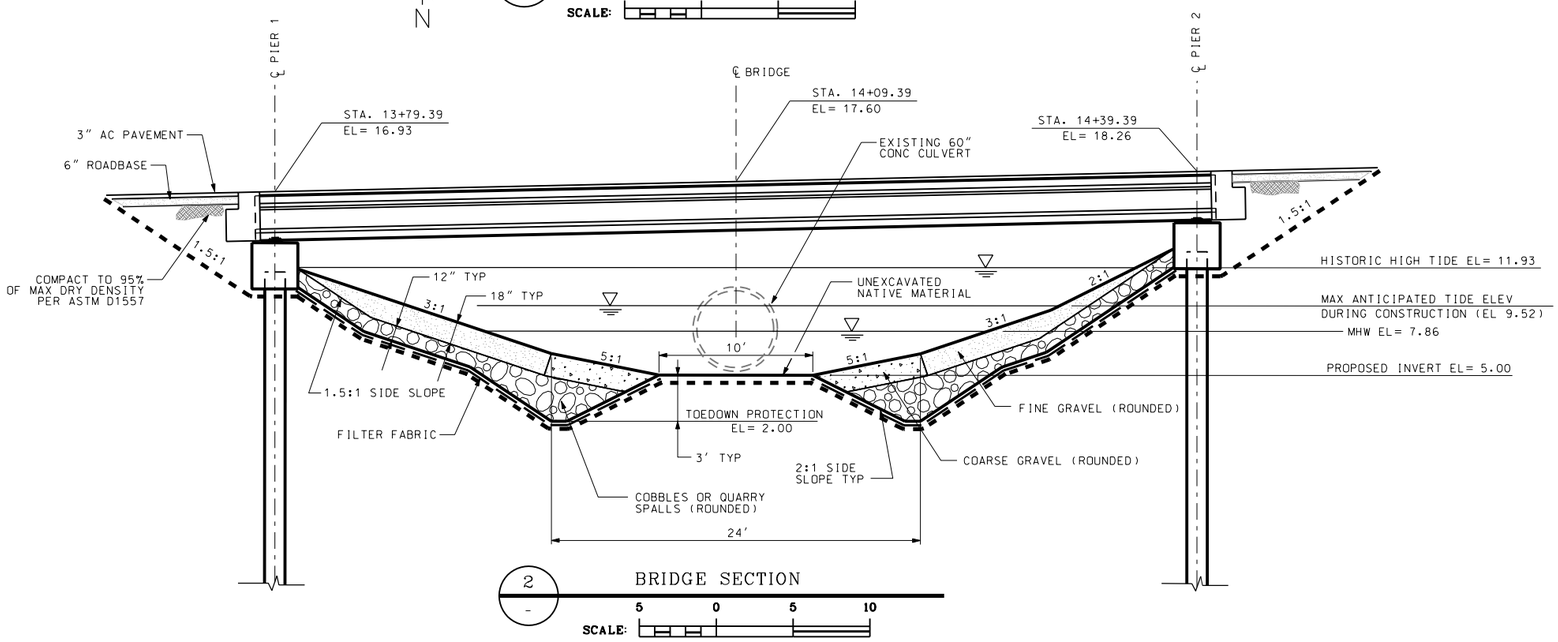
BRIDGE ELEVATION AND FOUNDATION
LAYOUT SOUTH KINGSTON ROAD

KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE	PLATE
D			JUNE 2003	C6
DSGN. IGP		CHK. YHC	SHEET 12	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY





CONSTRUCTION NOTES

(1) DEMOLISH AND DISPOSE OF CONCRETE CULVERT
(2) DEMOLISH AND DISPOSE OF STORM DRAIN MANHOLE/OUTFALL
(3) DEMOLISH AND DISPOSE OF STORM DRAIN PIPE
(4) CONSTRUCT CONCRETE GIRDER BRIDGE PER PLAN, PROFILE, SECTIONS, AND DETAILS
(5) CONSTRUCT CHANNEL IMPROVEMENTS PER PLAN, PROFILE AND SECTIONS
(6) CONSTRUCT STORM DRAIN MANHOLE PER KITSAP COUNTY STANDARD PLAN
(7) CONSTRUCT STORM DRAIN OUTFALL PER KITSCAP COUNTY STANDARD PLAN
(8) CONSTRUCT STORM DRAIN PIPE PER PLAN AND PROFILE
(9) CONSTRUCT ROAD IMPROVEMENTS PER PLAN, PROFILE, AND SECTION
(10) RELOCATE UTILITIES TO BRIDGE
(11) CONSTRUCT LARGE WOODY DEBRIS PER PLAN AND DETAIL

DESIGN NOTES

1. ALL DESIGNS, MATERIALS, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE OF WASHINGTON DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

2. GIRDERS SHALL BE DESIGNED FOR HS25 LIVE LOADING OR LRFD EQUIVALENT PLUS IMPACT FOR THE FOLLOWING DEAD LOAD:
- CONCRETE DEAD LOAD OF 160 LBS/CF
- SUPERIMPOSED DEAD LOAD OF 100 LBS/SF

3. FOUNDATION DESIGN SHALL INCORPORATE THE GEOTECHNICAL INFORMATION AS SPECIFIED IN THE "PRELIMINARY GEOTECHNICAL ENGINEERING SERVICES" OF THE CARPENTER CREEK ESTUARY SECTION 206 FEASIBILITY REPORT, TECHNICAL APPENDIX C.

4. ALL PILES SHALL BE STEEL OR CONCRETE AND SHALL BE DRIVEN TO A DEPTH SUFFICIENT TO DEVELOP A MINIMUM LOAD BEARING CAPACITY OF SIXTY (60) TONS PER PILE.

5. PILE CAP AND PILE SUBSTRUCTURE SHALL BE DESIGNED TO RESIST SEISMIC LATERAL LOADS BASED ON THE RECOMMENDED SEISMIC ACCELERATION FOR THIS SITE OF 0.29g.

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON
U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

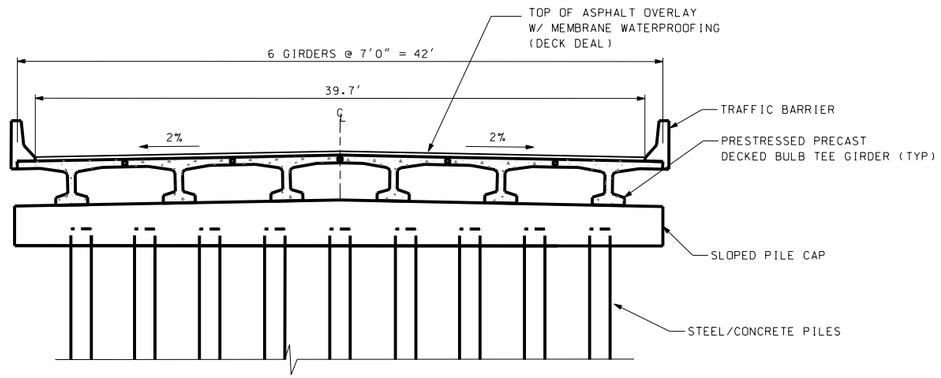
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

BRIDGE PLAN AND SECTION
WEST KINGSTON ROAD

KITSAP COUNTY, WASHINGTON

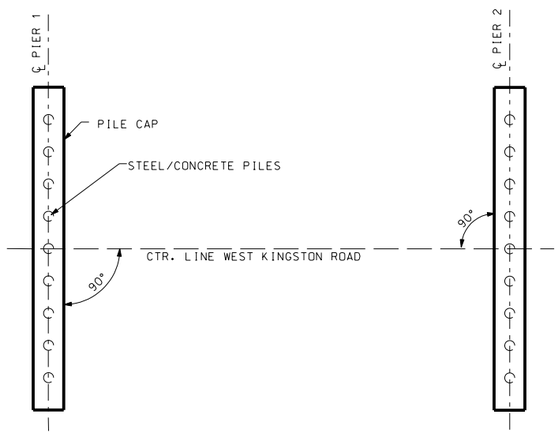
SIZE	INVITATION NO.	FILE NO.	DATE:	PLATE
D			JUNE 2003	C7
DSGN. IGP		CHK. YHC	SHEET 13	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



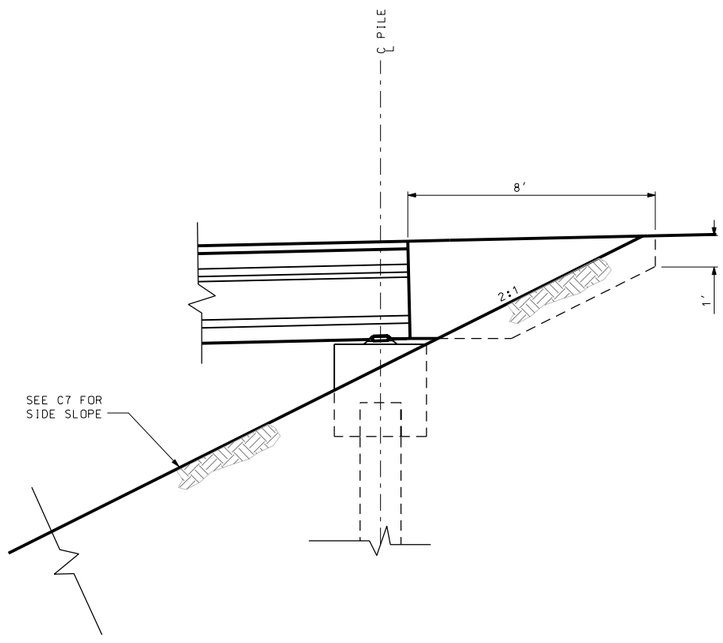
1 – BRIDGE ELEVATION

SCALE: 5 0 5 10



2 – FOUNDATION LAYOUT

SCALE: 10 0 10 20



3 – WING WALL

SCALE: 2.5 0 2.5 5

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

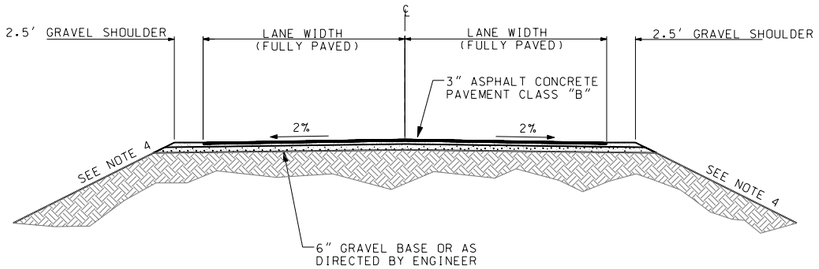
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

BRIDGE ELEVATION AND FOUNDATION
LAYOUT WEST KINGSTON ROAD

KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE	PLATE
D			JUNE 2003	C8
DSGN. IGP		CHK. YHC	SHEET 14	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



1. SURFACING DEPTHS SHOWN ARE MINIMUMS FOR ARTERIAL ROADS AND SHALL BE DESIGNED WITH A STRUCTURAL SECTION THAT TAKES INTO ACCOUNT THE LOAD BEARING CAPACITY OF THE SOILS AND THE TRAFFIC CARRYING REQUIREMENTS OF THE ROADWAY. PLANS SHALL BE ACCOMPANIED BY THE SOILS AND TRAFFIC ANALYSIS ON WHICH THE DESIGN IS BASED.

2. WHEN NATIVE SUBGRADE MATERIAL MEETS THE SPECIFICATIONS FOR GRAVEL BASE, THE 6" GRAVEL BASE COURSE CAN BE ELIMINATED OR SUBSTITUTED WITH A LESSER THICKNESS OF GRAVEL BASE OR EQUIVALENT MATERIAL.

3. CURED SECTION SHALL BE USED IN ALL URBAN AREAS UNLESS A DEVIATION IS APPROVED.

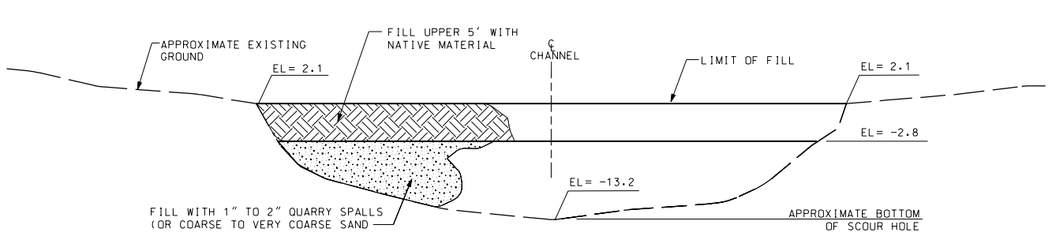
4. SIDE SLOPES SHALL BE CONSTRUCTED NO STEEPER THAN 2:1 FOR LOCAL ACCESS AND 4:1 FOR ARTERIALS ON BOTH FILL AND CUT SLOPES, UNLESS A TRAFFIC BARRIER IS PROVIDED.

5. FUNCTIONAL CLASSIFICATION AND EXISTING ADT DEFINED BY KCDPW TRAFFIC TRANSPORTATION DIVISION.

6. RIGHT-OF-WAY WIDTHS SHALL BE INCREADSED AS NECESSARY TO ACCOMMODATE ADDITIONAL LANES.

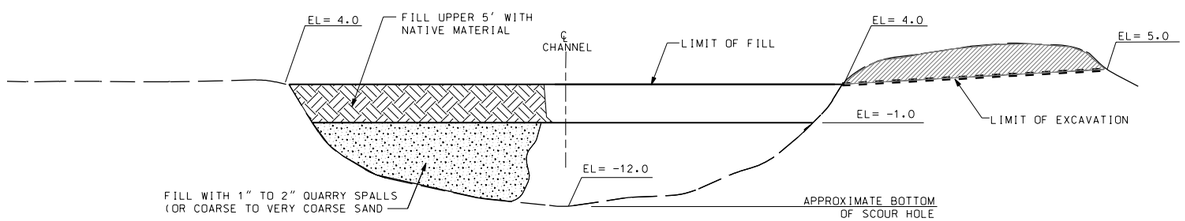
1 - TYPICAL ROAD SECTION

NTS



2 - DOWNSTREAM SCOUR HOLE/SECTION

SCALE: 10 0 10 20



3 - UPSTREAM SCOUR HOLE/SECTION

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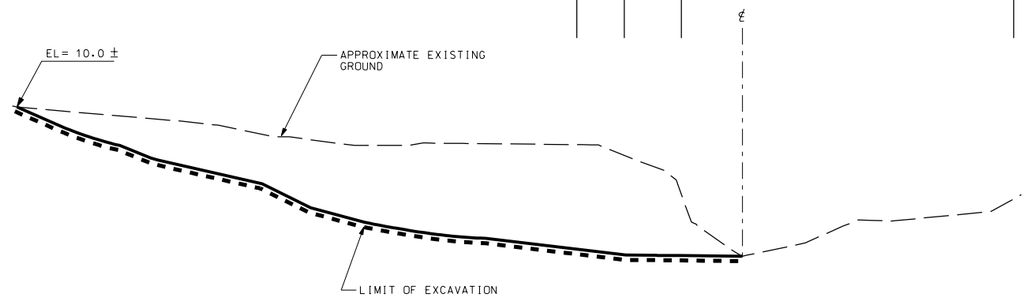
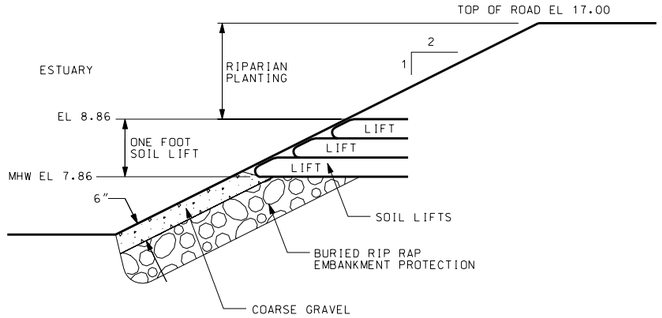


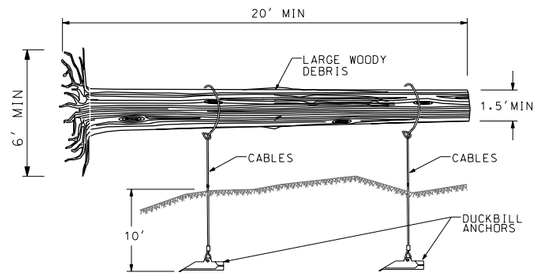
4 - HISTORIC ROADBED EXCAVATION

NTS



5 - SOUTH KINGSTON ROAD EMBANKMENT PROTECTION

NTS



6 - LARGE WOODY DEBRIS ANCHORING DETAIL

NTS

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

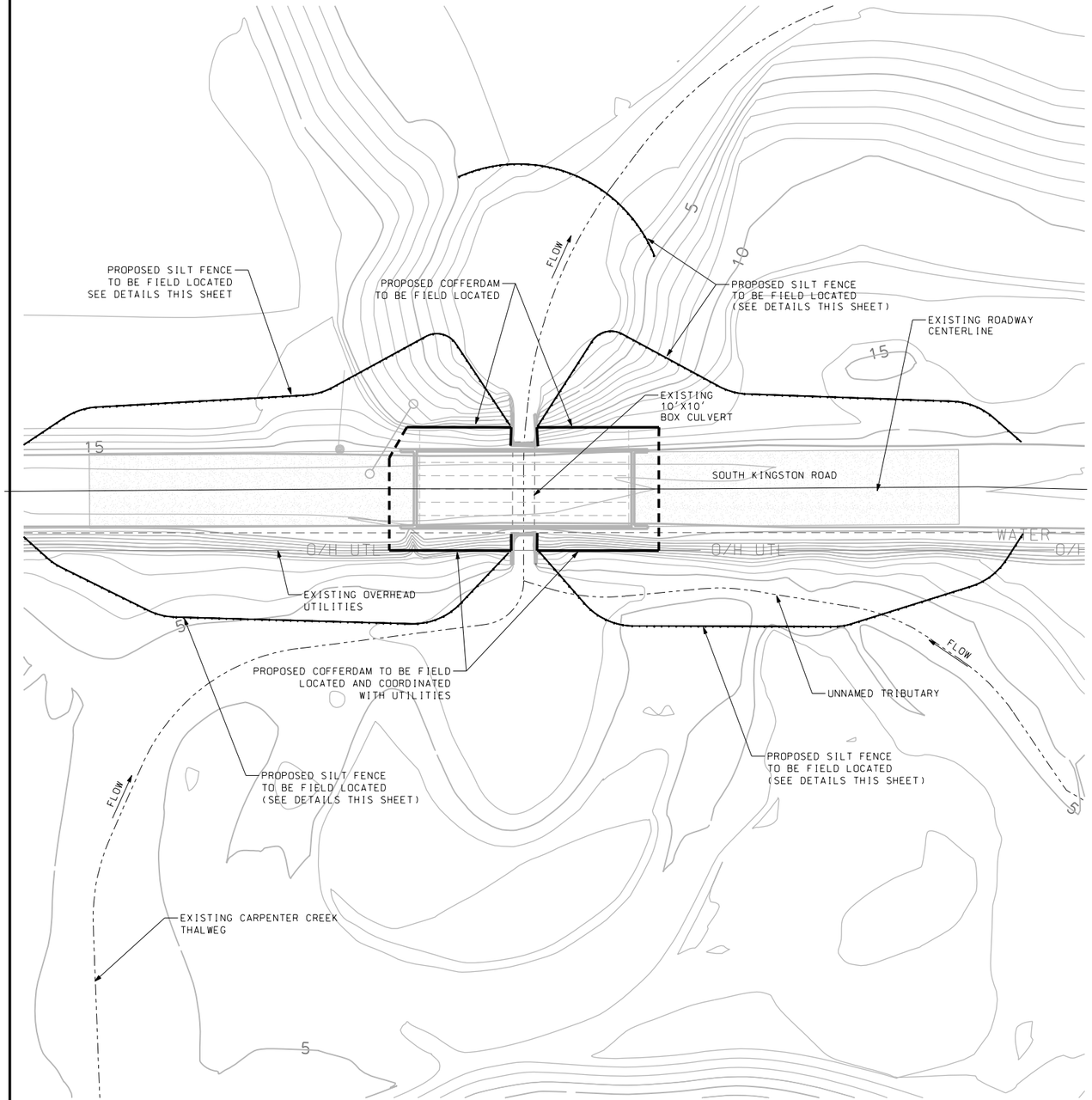
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

CHANNEL AND
ROAD DETAILS

KITSAP COUNTY, WASHINGTON

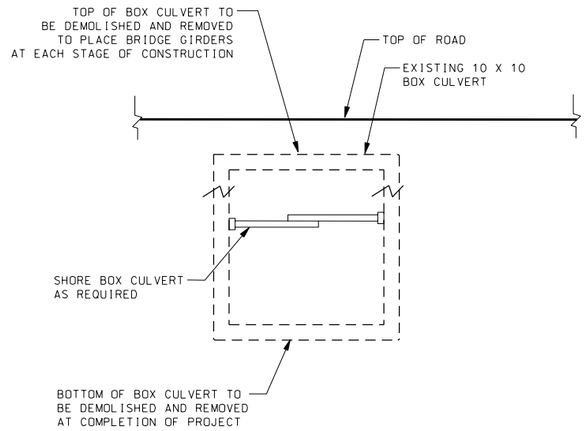
SIZE	INVITATION NO.	FILE NO.	DATE	PLATE
D			JUNE 2003	C9
DSGN. IGP		CHK. YHC	SHEET 15	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



PLAN

SCALE: 30 0 30 60



EXISTING BOX CULVERT DEMOLITION

NTS

DIVERSION NOTES

1. DIVERSION PLAN SHOWN ON THIS SHEET IS A SCHEMATIC REPRESENTATION ONLY

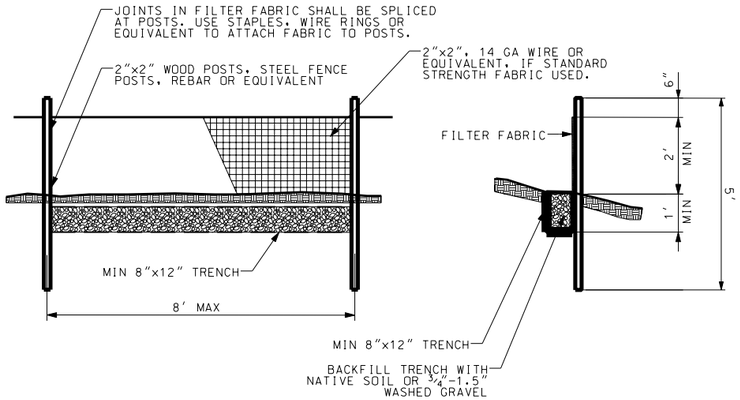
2. CONSTRUCTOR SHALL BE RESPONSIBLE FOR FINAL DESIGN AND PERFORMANCE OF ANY AND ALL DIVERSIONS

3. CONSTRUCTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES OR INJURIES CAUSED BY THE FAILURE OF ANY AND ALL DIVERSIONS

4. DEWATERING PUMP(S) SHALL PUMP WATER TO FOREST FLOOR OR TO A PERCOLATION BASIN, OR DESILTING TANKS SO THAT THE WATER DOES NOT RETURN DIRECTLY TO THE CREEK

5. SILT FENCING SHALL BE PLACED AS SHOWN PER DETAIL ON THIS SHEET. ADDITIONAL SILT FENCING MAY BE NECESSARY DURING CONSTRUCTION

6. ALL DIVERSION MATERIALS SHALL BE REMOVED FROM THE SITE AT THE COMPLETION OF THE PROJECT.



SILT FENCE DETAIL

NTS

35% DESIGN

TETRA TECH INC.
SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS
SEATTLE, WASHINGTON

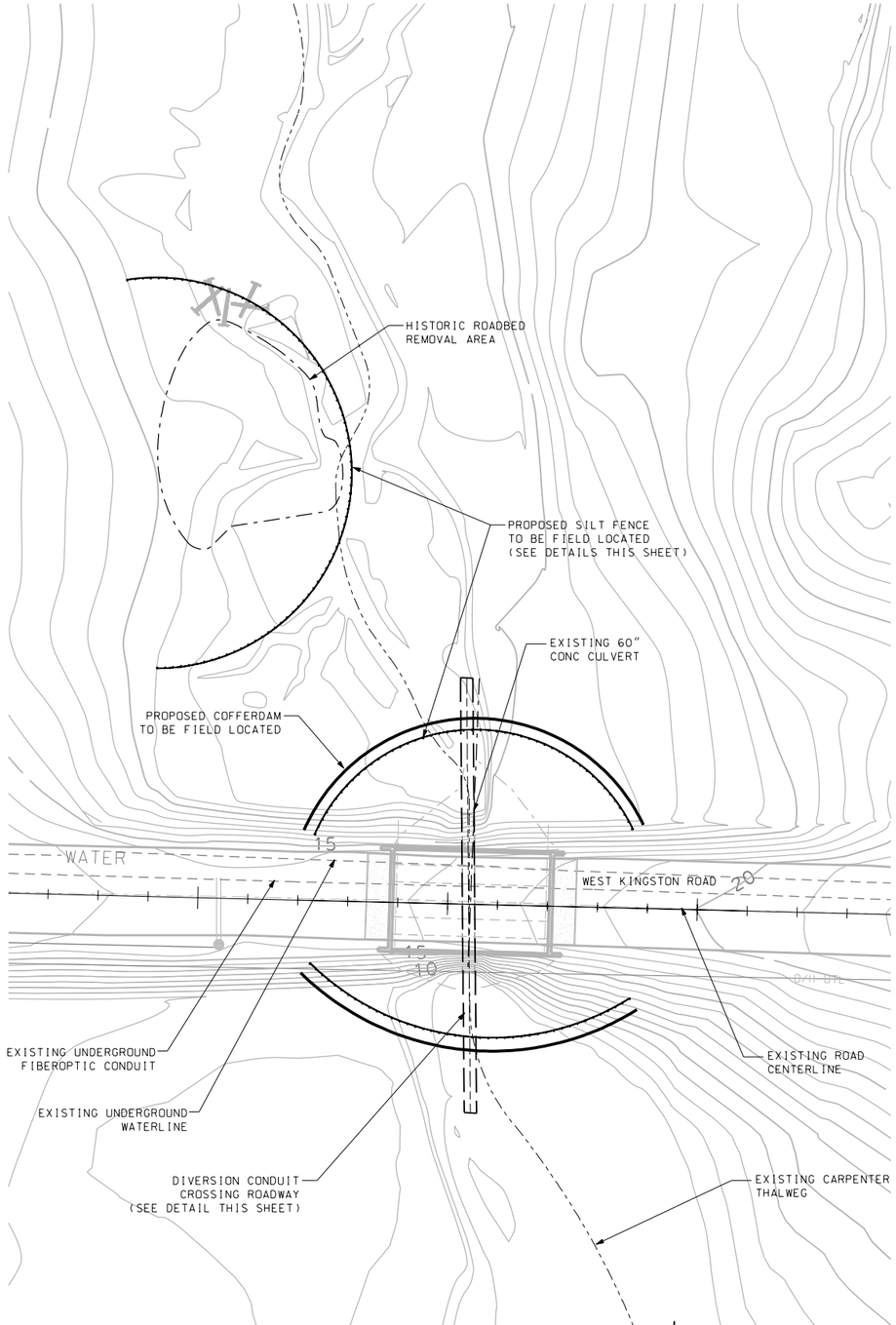
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

DIVERSION PLAN
CARPENTER CREEK SOUTH

KITSAP COUNTY, WASHINGTON

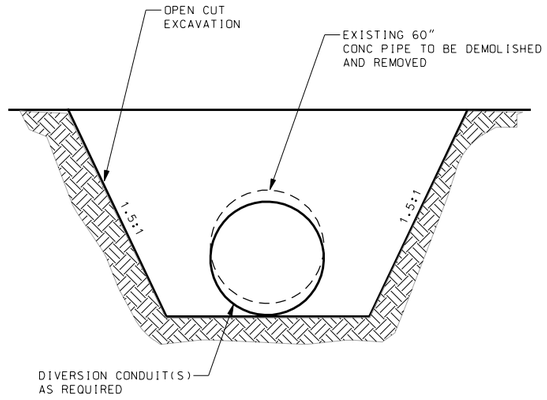
SIZE	INVITATION NO.	FILE NO.	DATE:	PLATE
D			JUNE 2003	C10
DSGN. IGP		CHK. YHC	SHEET 16	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



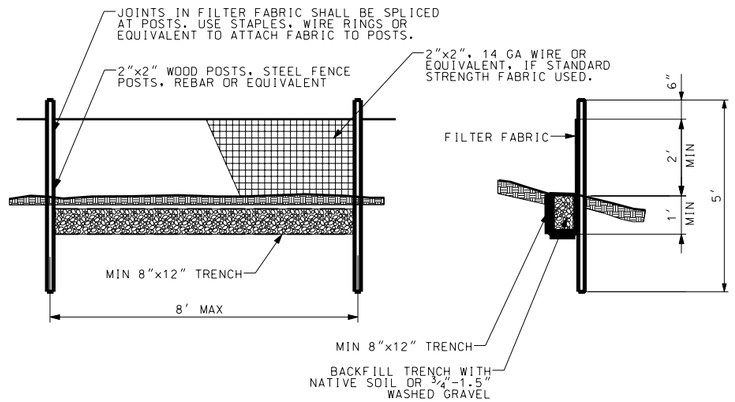
PLAN

SCALE: 30 0 30 60



CONDUIT DETAIL

NTS



SILT FENCE DETAIL

NTS

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35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

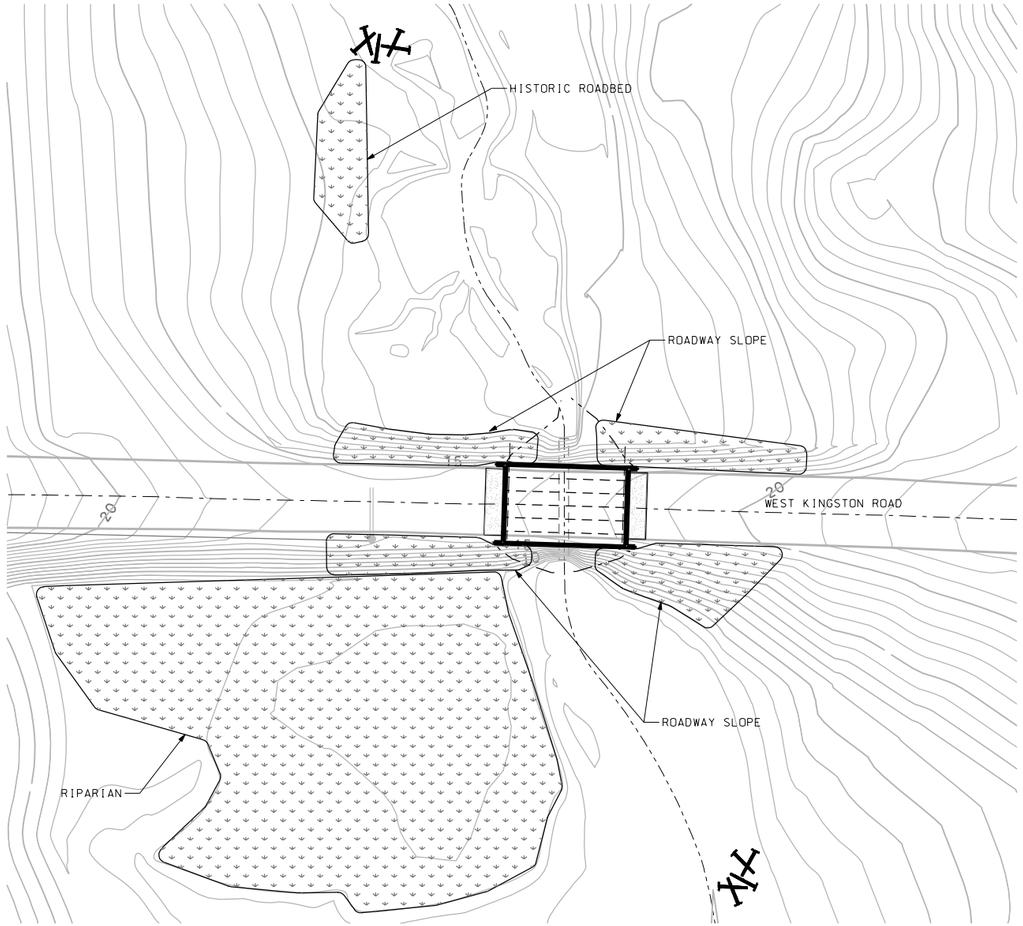
CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

DIVERSION PLAN
CARPENTER CREEK WEST

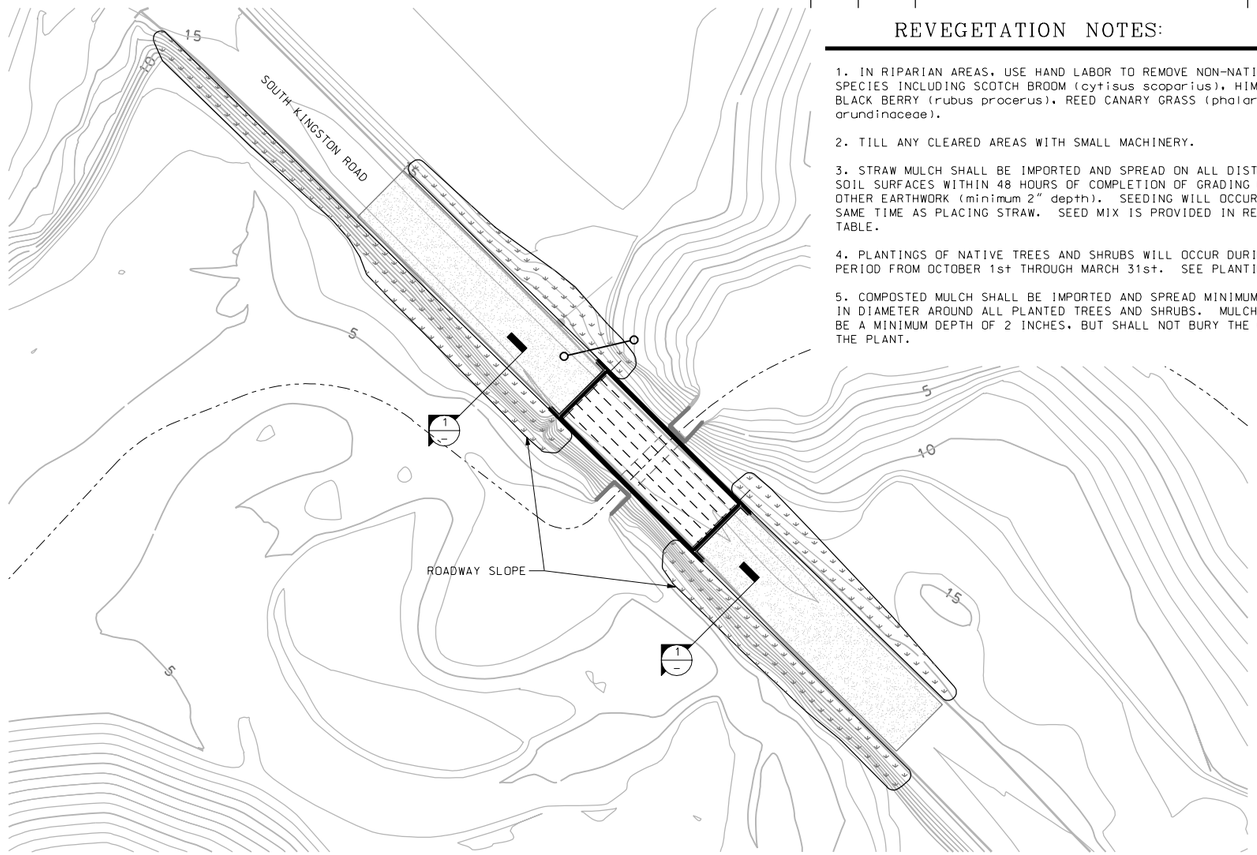
KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE:	PLATE
D			JUNE 2003	C11
DSGN. IGP		CHK. YHC	SHEET 17	

REVISIONS				
SYMBOL	ZONE	DESCRIPTION	DATE	BY



PLAN/WEST KINGSTON ROAD



N

SCALE: 40 0 40 80

PLAN/SOUTH KINGSTON ROAD

REVEGETATION NOTES:

1. IN RIPARIAN AREAS, USE HAND LABOR TO REMOVE NON-NATIVE SPECIES INCLUDING SCOTCH BROOM (cytisus scoparius), HIMALAYAN BLACK BERRY (rubus procerus), REED CANARY GRASS (phalaris arundinaceae).

2. TILL ANY CLEARED AREAS WITH SMALL MACHINERY.

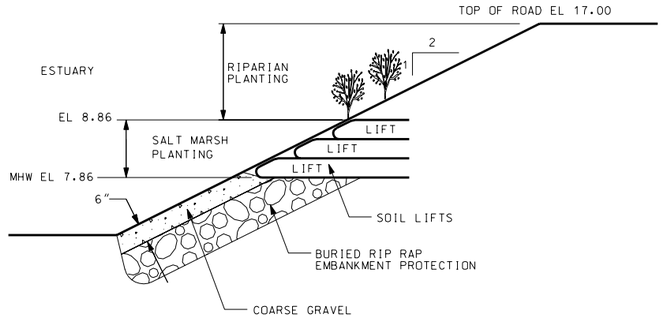
3. STRAW MULCH SHALL BE IMPORTED AND SPREAD ON ALL DISTURBED SOIL SURFACES WITHIN 48 HOURS OF COMPLETION OF GRADING OR OTHER EARTHWORK (minimum 2" depth). SEEDING WILL OCCUR AT THE SAME TIME AS PLACING STRAW. SEED MIX IS PROVIDED IN REVEGETATION TABLE.

4. PLANTINGS OF NATIVE TREES AND SHRUBS WILL OCCUR DURING THE PERIOD FROM OCTOBER 1st THROUGH MARCH 31st. SEE PLANTING LIST.

5. COMPOSTED MULCH SHALL BE IMPORTED AND SPREAD MINIMUM 1-FOOT IN DIAMETER AROUND ALL PLANTED TREES AND SHRUBS. MULCH SHALL BE A MINIMUM DEPTH OF 2 INCHES, BUT SHALL NOT BURY THE CROWN OF THE PLANT.

REVEGETATION TABLE

SPECIES NAME	COMMON NAME	STRATA	SIZE	DENSITY	LOCATION	QUANTITY
ALNUS RUBRA	RED ALDER	TREE	2 GAL	15 FT OC	RIPARIAN	55
PICEA SITCHENSIS	SITKA SPRUCE	TREE	5 GAL	15 FT OC	RIPARIAN	55
PINUS CONTORTA	SHORE PINE	TREE	5 GAL	15 FT OC	RIPARIAN	35
CORNUS STOLONIFERA	RED-OSIER DOGWOOD	SHRUB	1 GAL	10 FT OC	ROADWAY SLOPE	135
MALUS FUSCA	WESTERN CRABAPPLE	SHRUB	1 GAL	10 FT OC	SALTMARSH	45
RIBES SANGUINEUM	RED-FLOWERING CURRANT	SHRUB	1 GAL	8 FT OC	ROADWAY SLOPE	135
SAMBUCUS RACEMOSA	RED ELDERBERRY	SHRUB	1 GAL	10 FT OC	ROADWAY SLOPE	70
SALIX HOOKERIANA	HOOKER WILLOW	SHRUB	CUTTINGS	2 FT OC	ROADWAY SLOPE	270
ANGELICA LUCIDA	SEAWATCH ANGELICA	HERB	SEED	1 LB/ACRE	CLEARED AREAS WITHIN SALT MARSH ZONE	
ASTER SUBSPICATUS	DOUGLAS ASTER	HERB	SEED	1 LB/ACRE	CLEARED AREAS WITHIN SALT MARSH ZONE	
TRIFOLIUM WORMSKJOLDII	SPRING BANK CLOVER	HERB	SEED	2 LB/ACRE	CLEARED AREAS WITHIN SALT MARSH ZONE	
AGROSTIS OREGONENSIS	OREGON BENTGRASS	HERB	SEED	5 LB/ACRE	CLEARED AREAS WITHIN SALT MARSH ZONE	
CALAMAGROSTIS NUTKAENSIS	PACIFIC REEDGRASS	HERB	SEED	5 LB/ACRE	CLEARED AREAS WITHIN SALT MARSH ZONE	
DESCHAMPSIA CESPITOSA	TUFTED HAIRGRASS	HERB	SEED	5 LB/ACRE	CLEARED AREAS WITHIN SALT MARSH ZONE	
FESTUCA RUBRA	RED FESCUE	HERB	SEED	5 LB/ACRE	CLEARED AREAS WITHIN RIPARIAN ZONE	
HORDEUM BRACHYANTHERUM	MEADOW BARLEY	HERB	SEED	5 LB/ACRE	CLEARED AREAS WITHIN RIPARIAN ZONE	



1/– SOUTH KINGSTON ROAD EMBANKMENT PLANTING

35% DESIGN

TETRA TECH INC. SEATTLE, WASHINGTON

U.S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON

CARPENTER CREEK ESTUARY
SECTION 206 RESTORATION PROJECT

PLANTING PLAN AND NOTES

KITSAP COUNTY, WASHINGTON

SIZE	INVITATION NO.	FILE NO.	DATE:	PLATE
D			JUNE 2003	P1
DSGN. IGP		CHK. YHC	SHEET 18	